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SAN FRANCISCO GENERAL HOSPITAL MEDICAL CENTER

INSTITUTIONAL MASTER PLAN

November 1987

City & County of San Francisco
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EXECUTIVE SUMMARY

25 November 1987

This Institutional Master Plan for the San Francisco General Hospital Medical Center, submitted to the City and County of San Francisco, is a record of the Hospital's growth needs and development plans for the future as they are currently defined. This Master Plan should be reviewed not as a fixed document but as a vehicle for communicating identified needs and preferred methods of resolving those needs. It must be understood that this Master Plan will, periodically, require updating that will reflect changing policies and direction in the provisions of health care.

The information presented in this document is grouped into three general parts: 1) background information regarding the nature of the facility, services provided, history of growth, and description of the physical plant; 2) development plans for future growth; and 3) a study of the transportation, circulation, and parking needs of the facility.

San Francisco General Hospital is the County Hospital and, not surprisingly, is the busiest hospital in the county. With 582 licensed beds, it serves approximately 16% of all patients treated in the City. It provides extensive ambulatory care services, treating approximately 1,000 patients daily, and, as the designated Trauma Center for San Francisco, its Emergency Department treats approximately 280 patients daily.

San Francisco General is also one of the teaching hospitals for the University of California, San Francisco. The University, through a contractual arrangement with the County, provides professional staff for the Hospital. This arrangement provides mutual benefits to both parties.

The Medical Center currently contains approximately 1.2 million square feet of occupiable space in nine separate buildings. Of these buildings, only the Main Hospital Building, constructed in 1976, is structurally suitable for inpatient care. The other buildings were constructed before 1932 and meet neither current seismic nor health care design requirements for inpatient care. These older buildings are used for outpatient care, library, administration, and research.

SHORT RANGE PLAN

Within the next five years it is anticipated that Hospital needs will require construction of the following projects:

- A 14,700 square-foot AIDS Research Center atop the existing Pathology Building to be completed by late 1989.
- A Magnetic Resonance Imaging machine to be installed in Parking Lot A in early 1988.
- A 185-bed, 90,000 square-foot Mental Health Skilled Nursing Center in Parking Lot E at the north end of the campus to be completed by 1992.
- Parking facilities to accommodate up to 1200 cars to be completed by 1990.
- A remodel and consolidation of the existing kitchen facilities to be completed by 1992.
- A centralized contaminated waste storage area to be completed by early 1989.

Drawings and images of proposed construction in the short term phase are included in this report.

EXECUTIVE SUMMARY

25 November 1987

LONG RANGE PLAN

The long range development plan provides recommendations for the locational planning of future facilities which at this juncture cannot be clearly defined. It also presents suggestions for circulation and parking improvements.

To provide appropriate guidelines for future development on campus, land use "zones" were established. The intent behind the identification of these zones is to set aside developable areas within the campus for their most appropriate future areas, e.g., areas adjacent to the existing code conforming hospital would be set aside for hospital based construction. These zones include:

- Acute Care Zone at Building 100/200/300 site.
- Emergency Services Zone in the parking lot south of Emergency.
- Ambulatory Care Zones north and south of the Main Hospital Building along the Entry Drive.
- Research/Administration Zones at Building 1 site and between Buildings 10/20 and 30/40.
- Parking Zones at Building 9 site and below the Hospital plaza on Potrero Street.

Circulation improvements suggested include:

- Widening the main hospital driveway to facilitate drop-off and provide for a passing lane.
- Improving signalization at the Potrero and 23rd Street intersection to eliminate vehicular/pedestrian conflicts at this irregular intersection.
- Providing better pedestrian access to the Emergency Department from Vermont Street.

Other improvements to be considered in the future:

- Landscaping of the fire lane along Potrero Avenue to improve the campus appearance along Potrero Street.
- Installing additional on-site emergency water supply tanks.
- Subdividing the underground tunnels for better fire safety.

TRANSPORTATION MANAGEMENT PROGRAM

The Transportation Study included as part of this document should be viewed as the first step in establishing a transportation management program for the Medical Center. The designation of a program coordinator is in progress, once this is accomplished, the Hospital will formulate a specific transportation management system for review by the City and implementation.

HOSPITAL DESCRIPTION

INSTITUTIONAL OVERVIEW

"PROVIDER OF LAST RESORT"

San Francisco General Hospital Medical Center (SFGH) is a general acute care facility licensed for 582 beds. As a County hospital, SFGH is statutorily mandated under Section 17000 of the California Welfare and Institutions Code to be the "provider of last resort". Its primary mission, therefore, is the provision of health care services to the indigent and low income populations of San Francisco, which include significant numbers of newly arrived immigrants and patients with high acuity levels (such as perinatal, trauma and AIDS patients).

TEACHING HOSPITAL

In addition, through its affiliation with the University of California at San Francisco (UCSF), SFGH has a commitment to health care education and is considered a major teaching hospital. On an annual basis, between 880 and 900 medical housestaff rotate through the hospital. These concomitant commitments create a complex and multifaceted institution which is dedicated to efficiently providing the broadest scope of services possible while, at the same time, maintaining an excellent standard of quality of care.

GOALS

The major goals of SFGH are to:

- Provide care to all persons in need of services regardless of economic, cultural, language or other barriers that might otherwise prevent access.
- Provide services and leadership in the care of special populations such as major trauma AIDS patients and newly arrived immigrants.
- Maintain the scope of services provided in the face of a changing reimbursement environment without compromising the quality of care provided.
- Maintain compliance with state and federal licensing and certification standards.
- Respond to the needs of the community the hospital serves.
- Developing alternative service delivery strategies and mechanisms to increase efficiency and maximize resource utilization.
- Optimize informed decision-making through the development and refinement of hospital data bases.
- Provide an environment to promote education and research through its affiliation.

RELATIONSHIP WITH UNIVERSITY OF CALIFORNIA *INSTITUTIONAL OVERVIEW*

San Francisco General Hospital had been the teaching hospital for the University of California, San Francisco and the Stanford Medical Schools since 1872 when SFGH opened. The relationship between the City and the teaching hospitals changed in 1959 when Stanford moved their medical school to Palo Alto, leaving UCSF as the sole teaching affiliation. July 1, 1959 marked the beginning of the written Agreement between the UCSF School of Medicine and the City defining UCSF's relationship with SFGHMC.

The original Agreement called for the University to provide sufficient professional and support staff for the Departments of Anesthesia, Cardiology, Clinical Laboratories and Anatomic Pathology with the City reimbursing the University for expenditures incurred as negotiated annually. Over the years this Agreement has been used additionally to provide staff and services for the Departments of Emergency, Radiology, Oncology (AIDS Clinic), Pulmonary, G.I., Hemodialysis, Respiratory Therapy, Family Practice, Occupational Health, OB/GYN, Psychiatry and Rehabilitation Medicine. In terms of funding, this Agreement has grown from $173,639 in 1959/60 to over $21 million in 1986/87.

The Agreement also states that the University of California provides all of the professional medical staff at San Francisco General Hospital. In 1959 there were 3 full-time attending physicians, 10 in 1960, 32 in 1965 plus 385 clinical faculty, and as of December, 1986 this number grew to 233 full-time physicians and 601 clinical faculty. In addition to the medical staff, the University operates an undergraduate and postgraduate medical training program at SFGH, which now total 203 postgraduate positions funded by the City. An additional 70 (approx.) positions are assigned to SFGH, funded from other sources, for patient care, training, and research; all departments have major undergraduate teaching programs at SFGH and at any given time there is an average of 48 medical students at the Hospital.

While the major UCSF activities at SFGH are those of the Medical School, the Schools of Pharmacy, Dentistry and Nursing also have student and postgraduate programs at SFGH.

Over the years, the University has built up a large non-academic staff, not only in support of research and teaching activities, but also in support of patient care activities. The non-academic staff now totals approximately 700 employees.

The 1959 Agreement called for the City to allot the Medical School sufficient space, within the limits of the then existing buildings, for the research needs of the faculty. Since the hospital moved to its new facility adjacent to the old buildings in 1976, a substantial portion of the vacated premises have been rebuilt for research purposes. Privately funded programs include the Gladstone Laboratories for cardiovascular research, the Rosalind Russell Laboratories for arthritis research, the Rice Laboratory for liver research, the Gallo Laboratory for research on the effects of alcohol on the nervous system, a center for infectious disease research, just to name a few. Projected facilities included a lung biology center to study the effects of environmental pollutants on the lung, the Trauma Foundation laboratories and offices of the Mellon Foundation for epidemiological studies. Some 80,000 square feet of academic space is provided by SFGH in support of faculty activities; the remainder of the space is rented by UCSF on long-term rental agreements. All research grants from governmental and private agencies total approximately $20 million in direct costs. The University also operates and funds an Animal Care Facility at the Hospital.

SERVICES PROVIDED — *INSTITUTIONAL OVERVIEW*

LICENSED SERVICES

The Hospital has a total licensed capacity of 582 beds. The beds are subdivided into the following categories.

34	Perinatal Beds
33	Pediatric Beds
14	Intensive Care Beds
8	Coronary Care Beds
6	Acute Respiratory Care Beds
6	Intensive Care Newborn Nursery
6	Burn Care Beds
388	General Acute Care Beds
495	Total Acute Care Beds
87	Acute Psychiatric Beds
582	**TOTAL LICENSED BEDS**

Other approved services, by license, are:

- Cardiovascular Catheterization Laboratory
- Dental Service
- Comprehensive Emergency Medical Services
- Audiology
- Speech Pathology
- Social Service
- Respiratory Care Services
- Physical Therapy
- Outpatient Services
- Occupational Therapy
- Nuclear Medicine

SERVICES DESCRIPTION — *INSTITUTIONAL OVERVIEW*

The services provided at San Francisco General Hospital are grouped into the following major categories:

- Inpatient Services
- Emergency Services
- Ambulatory Care Services
- Special Services

Within each of these categories is a broad range of subspecialties which define the complex level of care provided at the Hospital. These are outlined below.

INPATIENT SERVICES

Subspecialties within acute care nursing services include:

- **General Medicine**

  The demand for medical care arises from San Francisco residents with limited or no resources to pay for their treatment, from cardiac victims and other medical emergencies city-wide, and from people residing in areas close to SFGH.

  General Medicine includes:

  - cardiology
  - clinical pharmacology
  - gastroentology
  - general internal medicine
  - infectious diseases
  - neurology
  - oncology (including AIDS)
  - pulmonary medicine
  - rheumatology
  - renal medicine

  Care for patients in critical care units is generally provided by these services.

- **Surgery**

  Demand for surgical services comes from a variety of sources: 1) trauma and burn victims from San Francisco and the Bay Area at large; 2) San Francisco residents who have no ability or a limited ability to pay for surgical services; and 3) residents of the southeastern portion of the City who use SFGH because of its convenient location.

  Surgery includes:

  - extremity surgery
  - neurosurgery
  - ophthalmology
  - oral surgery
  - orthopedics
  - otolaryngology
  - plastic surgery
  - trauma surgery
  - urology
  - ambulatory surgery
  - general surgery

SERVICES DESCRIPTION — *INSTITUTIONAL OVERVIEW*

INPATIENT SERVICES (Cont'd)

- **Pediatrics**

Demand for pediatric services comes from three sources: 1) families living in the vicinity of the hospital; 2) children who are victims of trauma and other emergencies occurring within San Francisco; and 3) children who are from families with limited financial resources, including new immigrants to the City. Because the patient population of SFGH is frequently from a modest economic and educational background, there are many high-risk pregnancies, leading to high utilization of the nursery.

Pediatrics includes:

- newborn nursery (including intensive care for newborns and regular newborn care)
- medical and surgical care for children up to 18 years old
- ambulatory care for children and youths
- emergency care for children and youth
- services for sexually abused children
- sickle cell center
- Koret Center for nutrition

- **Obstetrics/Gynecology**

Women who do not receive adequate prenatal care often require more complex inpatient obstetrical services than those who do. Inpatient services are far more costly than preventive outpatient services. However, many pregnant women, especially adolescents and undocumented immigrants, do not seek prenatal care due to financial and other barriers. Consequently, intense obstetrical services are often necessary to protect the lives of the mother and the infant.

Obstetrics/Gynecology includes:

- intrapartum care for normal and high risk cases
- labor room services
- delivery room services
- obstetrical anesthesia
- post-partum care
- family planning services
- alternative birth center
- prenatal testing

SERVICES DESCRIPTION — *INSTITUTIONAL OVERVIEW*

INPATIENT SERVICES
(Cont'd)

- **Psychiatry**

Psychiatric inpatient services are needed for individuals who are a danger to themselves or others, or are unable to care for their basic needs such as food, shelter, and clothing. Many such psychiatric patients are involuntary and have poor social networks and/or toxicological conditions. They are difficult to treat and unlikely to be served in other mental health facilities. A need also exists to provide inpatient services to county jail inmates who require intensive psychiatric treatment, sometimes in conjunction with medical care.

Emergency evaluation, crisis intervention, and triage services are needed for individuals brought in by the police for unusual or violent behavior; those experiencing stress due to a sudden change in their lives; those in treatment elsewhere but experiencing an acute disturbance while their own therapist is unavailable; or those with concomitant psychiatric problems who are receiving medical treatment in the SFGH emergency department or other inpatient departments.

Psychiatry includes:

- Acute short-term psychiatric care
- Forensic psychiatric hospitalization for county jail inmates
- Psychiatric emergency services
- Consultation and liason services
- Infant/parent programs
- Black, Latin and Asian/Pacific Islander focus programs
- Recidivism Team
- Gay and lesbian task force
- Women's task force
- Substance abuse services (methadone, detoxification and maintenance)

- **Family Practice**

Demand for family practice services come from four sources:

1. The outlying satellite clinic network including the South of Market, Southwest and Potrero Hill Health Centers;

2. The SFGH Family Health Center;

3. San Francisco residents who have limited or no ability to pay for treatment (usually referred by the Emergency Department);

4. Community family physicians and nurse practitioners.

Adult patients with medical/surgical problems are seen on the family practice unit, and pediatric and obstetric care for patients is provided on those services with ongoing family practice involvement. Emphasis is placed on providing family systems/cross-cultural care to entire families throughout an individual's life cycle.

SERVICES DESCRIPTION *INSTITUTIONAL OVERVIEW*

INPATIENT SERVICES (Cont'd)

Family Practice also encompasses delivering the following services:

- Cardiology
- Pulmonary Medicine
- Oncology
- Rheumatology and Immunology
- Clinical Pharmacology
- Geriatrics
- Gastroenterology
- Hematology
- Endocrinology
- Infectious Disease
- Medicine

EMERGENCY SERVICES

SFGH's Emergency Department is the county's primary facility for major traumas and mass casualties, since it is the only hospital with 24-hour provider capability in all major medical and surgical sub-specialties. It provides resuscitation and stabilization for major medical and trauma patients; evaluation and treatment of emergent, urgent and non-urgent medical and surgical problems; and prehospital evaluation and management via radio telemetry of all paramedic care provided in San Francisco. Patients are transported by the Paramedic Division and private ambulance providers. As the major entryway to SFGH, the Emergency Department saw 82,167 patients in 1986 and provided 58% of all admissions to the hospital. More than 1300 telemetry calls were handled monthly by the Base Station.

The Emergency Department houses three resuscitation rooms, four suture rooms, an infected case room, an acute medical ward, a six-hour observation ward, and a medical ambulatory care area with 12 patient care rooms (for nonacute adult care 16 hours daily, and pediatric care 8 hours daily). Space is allocated for Medical Social Services Consultation and a Stat Laboratory for emergency patients. In addition, a comprehensive Radiology Department and the Bay Area Regional Poison Control Center are immediately adjacent to the Emergency Department providing 24-hour consultation capability. The Department provides training for its Mobile Intensive Care paramedics as well as Medical and Surgical Residents.

SERVICES DESCRIPTION *INSTITUTIONAL OVERVIEW*

AMBULATORY CARE SERVICES

Ambulatory Care services at SFGH are organized under the Division of Outpatient and Community Services (DOCS), which operates eleven major centers, seven of which are located within the Hospital campus and three which are located within the Community. The Dental Center provides services at both the Hospital and the satellite clinics. Over 100 clinics, special projects and programs are managed within the 11 centers. The volume of services is over 350,000 annually and all outpatient services are linked directly to inpatient services to insure continuity of care.

The Ambulatory Care programs at SFGH primarily serve patients who live in the vicinity of the hospital or its satellite clinics, those who have limited financial resources, and those who are referred for follow-up care after an emergency visit or inpatient stay. In addition, Ambulatory Care services provide special programs to particular segments of the population such as refugees and other immigrants from Southeast Asia and Central America, municipal workers, and AIDS patients.

HOSPITAL-BASED OUTPATIENT PROGRAMS

- **The Adult Medical Center**

  Located on the first and third floors, in the outpatient section of the new San Francisco General Hospital Medical Center building, the center offers a variety of clinic services to adults including medical screening, primary care (General Medicine Clinic), and medical specialty services (Chest, Diabetes, Diabetes Foot Education, Oncology, Endocrinology, Gastrointestinal, Hematology, Hypertension Evaluation, Parasitology, Infectious Diseases, Renal, Rheumatology, Occupational Health, Cardiac and Dermatology). In addition, the Adult Medical Center, also administers the Center for Municipal Occupational Safety and Health, which provides preemployment and annual physical examinations for Hospital employees and, by contract, for the Municipal Railways Department, Fire Department and Civil Service Commission. Evening clinics are also provided.

- **The Adult Surgical Clinics**

  Located on the third and fourth floors in the outpatient section of the new San Francisco General Hospital Medical Center building, the Third Floor Adult Surgical Center offers general surgery services and surgical specialty services (Vascular, Proctology, Plastic, and Extremity Trauma), general orthopedic clinic services and orthopedic specialties (Sports Medicine, Hand, Podiatry, Pediatric Orthopedic and Spine), and urological services. The Fourth Floor Adult Surgical Center offers medical and surgical services through the Neurology and Neurosurgery clinics, the Otolaryngology clinic, the Optometry and Ophthalmology clinics, and the Audiology service. Medicine refill services are also available for patients of the Neurology and Neurosurgery clinics.

SERVICES DESCRIPTION — *INSTITUTIONAL OVERVIEW*

AMBULATORY CARE SERVICES (Cont'd)

. **The Women's Health Center**

Located on the fifth floor in the outpatient section of the new San Francisco General Hospital Medical Center building, the clinics offered in this center are Gynecology, Obstetrics, Dysplasia and Infertility. Prenatal education and exercise programs and a special teen obstetrics program are also available. Extensive family planning services, including therapeutic abortions, tubal ligations, vasectomies, and counseling services are provided in the Family Planning Clinic. A teenage Family Planning Program offers medical services, pregnancy testing, birth control, and outreach services through the Children's Health Center.

. **The Children's Health Center**

Located on the sixth floor in the outpatient section of the San Francisco General Hospital Medical Center building, this center makes available emergency, general and specialty (Allergy, Dermatology, Cardiac, Neurology, Hematology, Renal, Urology and Multispecialty) pediatric services. A range of medical, psychiatric and medical social services is available to children eleven to nineteen years of age through the Adolescent Health Program and to sexually abused children and adolescents through the Child and Adolescent Sexual Abuse Resource Center. The Learning Assessment Center, supported primarily by the San Francisco Unified School District, offers testing and assessment services to children identified as having learning difficulties. The services include medical, psychological, social, speech and language, and learning disciplines.

Pediatric Emergency Services are provided within the Children's Health Center for all acute care situations (all trauma cases are handled by the Emergency Department). Approximately 50,000 cases annually (or 160 cases daily) are handled on a walk-in basis from Monday to Friday (8:00 a.m. to 11:30 p.m.) and on Saturdays (1:00 to 9:00 p.m.).

. **The Family Health Center**

Located on the first and fifth floors of Building 80 of the San Francisco General Hospital Medical Center, the Family Health Center provides comprehensive primary care services to families, including infants, children, teenagers, adults and elders. Each family is assigned to a provider and becomes a member of a group practice which offers, in addition to the services of their family doctors and family nurse practitioners, prenatal care, well baby cluster visits, nutritional assessment and education, family therapy, social services, podiatry and health eduction. The Family Health Center also serves as the training clinic for the Family Practice Program and sponsors the Refugee Clinic.

The Refugee Clinic program has been developed to meet the language, cultural and social needs of the newly arrived. It is particularly focused on non-English speaking refugees and maintains a staff with language capabilities in Vietnamese, Laotian, Cambodian, Mien, Chinese, Ethiopian, Polish, Czechoslovakian and Afghan. Southeast Asian and Central American refugees make up the largest patient groups needing both medical screening and primary care.

SERVICES DESCRIPTION *INSTITUTIONAL OVERVIEW*

AMBULATORY CARE SERVICES (Cont'd)

- **AIDS Program**

The AIDS Ambulatory Care Clinic delivers care for persons with AIDS and ARC. Services provided include screening and referral of HIV-infected individuals, comprehensive medical care, comprehensive and coordinated psycho-social support services and clinical research. Procedures are performed in the Ambulatory Care Clinic which would otherwise require hospital admission, including complex infusions of antibiotics and chemotherapy, intravenous hydration and blood transfusions. On-site phlebotomy is performed as well as Medi-Cal enrollment and SFGH patient registration.

The Ambulatory Care AIDS Clinic at San Francisco General Hospital provides substantial amounts of community and professional education in the Bay Area. As district clinics and satellite clinics of the Health Department begin to assume a greater role for the management of HIV-infected patients in the community setting, these educational and outreach functions will become increasingly important.

SPECIAL SERVICES

SFGH provides a number of services that reflect its unique role in meeting the special needs of its patients and the community as a whole. These services are for the most part not duplicated elsewhere in the community, or at least not to the extent that they are provided at SFGH. In addition, many are among the more costly to provide and add significantly to the cost of operations of the institution. Availability of these services also contribute to the hospital's patient acuity levels, which are generally higher than those of the community norms. Special services include:

- **Trauma Center**

SFGH is the only Trauma Center in San Francisco. The hospital has the staff and capacity to care for the most severely injured patients, going well beyond routine emergency services available at most hospitals. This service requires a significant reserve capacity to meet the unplanned admission of severely injured patients who require immediate surgical intervention and costly intensive care services.

- **Poison Control Center**

The San Francisco Bay Area Regional Poison Control Center is directly funded by SFGH and is the only comprehensive poison center in Northern California. It provides services to over six million residents in the greater bay area. The Center has 3 local and toll-free numbers available on a 24-hour basis.

- **Interpreter Services**

SFGH Interpreter Services makes a significant investment in interpreters and other forms of patient advocacy to meet the needs of its non-English speaking patients. Approximately 26,547 interpretation encounters were rendered in 1985. There are 340 designated bilingual employees at SFGH who can provide interpretation services in Spanish, Chinese, Tagalog, Indo-Chinese, Korean, Japanese, Samoan, Italian, and sign language.

SERVICES DESCRIPTION — *INSTITUTIONAL OVERVIEW*

SPECIAL SERVICES
(Cont'd)

- **Medical Social Services**

SFGH makes a disproportionate investment in Social Services as compared with non-public institutions. This is due, in part, to the service needs of the low income transient population served by the hospital, in that eligibility determination is more difficult and time consuming for this group, and, in part, to the cost of maintaining 24-hour service. SFGH has a case-mix of patients needing a broad scope of support services.

- **Patient Referral and Assistance Unit**

The Patient Referral and Assistance Unit's primary goal is to assure the accessibility of appropriate health care services to patients utilizing San Francisco General.

This program was begun in 1982 and has successfully decreased the over-utilization of the Emergency Department and certain other services. Triage/assessment and referral services, information on health care and usage of the Outpatient Clinic system, and health education services are provided both by telephone and in person at the hospital. The unit is both multi-lingual and multi-cultural, and health education materials have been translated into several languages to improve preventive and follow-up services.

- **The Patient Education Resource Center**

The Patient Education Resource Center (PERC) is a clearinghouse for a collection of over 600 patient education handouts and audiovisual presentations. The Resource Center has been designed to increase access to high-quality language and culture-specific health education materials for the multi-ethnic and multi-cultural patients of San Francisco General Hospital. Assistance and consultation on issues of health education policy and practice as well as support in the development of new education materials are also available through the Patient Education Resource Center.

- **Rehabilitation Services**

SFGHMC provides acute services for patients requiring physical, occupational and speech therapy. Referral is made to other facilities in San Francisco for patients needing ongoing rehabilitative care.

SERVICES DESCRIPTION — *INSTITUTIONAL OVERVIEW*

SPECIAL SERVICES
(Cont'd)

- **AIDS Program**

The care of patients with a complex disease such as AIDS, which necessarily involves many medical and social care disciplines, must be carefully coordinated. This coordination is required to insure that the care is both maximally effective and cost efficient. The system of care pioneered in San Francisco for the care of AIDS patients consists of three key elements. These include a dedicated AIDS inpatient unit as well as an array of community-based service providers. The most critical aspect of this model, however, and the one which allows for the control of the other components, is the AIDS Outpatient Clinic at San Francisco General Hospital. This clinic is the professional "home" for the attending physician staff directly involved in all aspects of AIDS patient care. The AIDS Outpatient Clinic is a national model of response to the care of such a complex disease in that it is both multidisciplinary, from a medical perspective, and involves psychosocial providers, including representatives of community-based service agencies. The success of San Francisco's response to AIDS depends largely on the effectiveness of the AIDS Outpatient Clinic at San Francisco General Hospital. If patients cannot be efficiently and rapidly seen and cared for in the AIDS Outpatient Clinic, the demands on the acute care hospital and emergency facility would rise precipitously; thereby, contributing not only to the deterioration of care, but to an increase in cost to the Health Department.

San Francisco General Hospital provides acute nursing care for patients with AIDS and ARC in the inpatient setting. A Medical Special Care Unit, Ward 5A, has been specifically designated for AIDS treatment. Nursing care is provided from a holistic perspective which includes attention to psychosocial and spiritual needs as well as patient advocacy. A key focus is early and comprehensive discharge planning to keep hospital stays to a minimum.

- **Newcomer Program**

The Newcomer Program addresses the language, cultural and social needs of the newly arrived. It is particularly sensitive to those patients that are recovering from the experiences of torture and war.

- **Perinatal Services**

Access to the SFGH's Perinatal Services has resulted in a 50% increase in the acuity of babies born at the hospital. Conscious outreach efforts have been made to provide services to traditionally underserved women, especially Southeast Asian, Native American, and Central American refugees. The Women's Center doubled their program in 1982-83 and has since added nurse midwives and translation services to meet the needs of these patients. Special programs are also offered to deal with the increasing number of substance abuser deliveries at the hospital. Two-thirds of all the program's participants are Medi-Cal mothers and 98% of all infants are Medi-Cal.

SERVICES DESCRIPTION *INSTITUTIONAL OVERVIEW*

COMMUNITY-BASED OUTPATIENT SERVICES

Three satellite clinics provide the continuity and coordination of health care services to local communities and are staffed by doctors from SFGH. The SFMCOIP Board of Directors is the legal governing body of the clinics.

SFGH provides full backup services that cannot be performed at the centers, including all necessary laboratory studies, x-ray, outpatient consultation, and inpatient care. Patients are seen at the centers on an appointment and drop-in basis.

- **South of Market Health Center**
  551-555 Minna Street

  Provides family-oriented primary care services, including podiatry and general dentistry, to residents of the South of Market area. The Center provides care five days and two evenings per week and is staffed by physicians, registered nurses, clinical pharmacists, medical social workers, nutritionists, and family health workers. Any services which cannot be performed at the Center are provided at San Francisco General. These include some laboratory studies, x-rays, specialty service consultation and inpatient care. Patient are seen at this center via the appointment and drop-in system.

- **Caleb G. Clark Potrero Hill Health Center**
  23rd and Wisconsin Street

  Provides a full range of primary, comprehensive health and dental care to its patients and especially those residents of the Potrero Hill area. The Center offers its services five days and one evening per week and has backup support services from San Francisco General Hospital. Its staff consists of physicians, nurse practitioners, registered nurses, clinical pharmacists, medical social workers, nutritionists and health workers.

- **Southeast Health Center**

  Offers comprehensive health and dental care to its patients and especially to those who reside in the Bayview-Hunter's Point area. The Center provides care five days and two evenings per week and is staffed by a range of providers including physicians, nurse practitioners, registered nurses, health educators, and nutritionists. The Center has back-up support from San Francisco General Hospital.

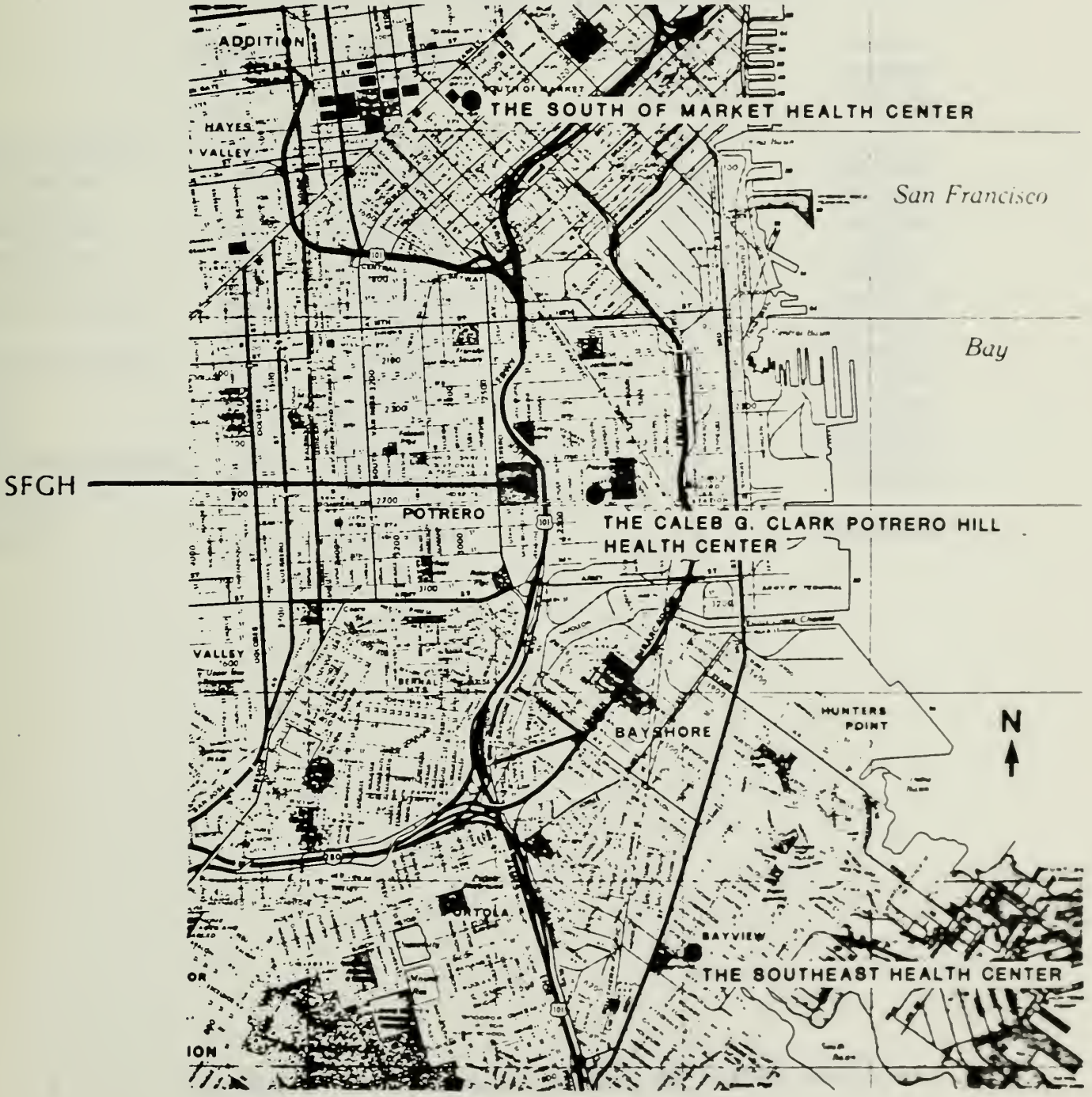
- **The Dental Center**

  Provides a comprehensive range of primary, secondary, and tertiary dental services in four locations: Southeast Health Center, South of Market Health Center, Potrero Hill Center, and the General Dentistry and Oral Surgery Clinic at SFGH. The Oral Surgery Department provides backup for inpatient dental services. Dental services are also available for non-ambulatory inpatients at the hospital. The staff consists of oral surgeons, dental assistants, dental hygienists and registered nurses.

SERVICES DESCRIPTION | *INSTITUTIONAL OVERVIEW*

COMMUNITY-BASED OUTPATIENT SERVICES (Cont'd)

This map indicates the locations of the three satellite clinics in San Francisco.



COMPARISON OF HOSPITAL USE IN SAN FRANCISCO *INSTITUTIONAL OVERVIEW*

The City and County of San Francisco has 4,924 licensed beds distributed among 15 hospitals. With its 582 beds, SFGH has a 12% share of the total beds licensed.

As illustrated by the table below, SFGH is the busiest of all the hospitals in San Francisco, treating nearly 16% of all the hospital discharges in the City in 1985.

	Number of Beds	Number of Patient Days/% of Total	Average Length of Stay	Number of Discharges /%of Total
CHILDREN'S HOSPITAL	382	67,982/7.5%	5.5	12,466/9.8%
CHINESE HOSPITAL	59	14,173/1.6%	6.1	2,305/1.8%
RALPH K. DAVIES	341	38,148/4.3%	8.6	4,460/3.5%
FRENCH HOSPITAL	297	24,736/2.8%	6.5	3,824/3.0%
GARDEN SULLIVAN	129	7,865/0.9%	17.10	438/0.3%
MARSHAL HALE	215	29,099/3.2%	10.1	2,870/2.3%
KAISER FOUNDATION	323	86,717/9.7%	5.4	16,003/12.6%
MT. ZION	448	71,967/8.0%	7.1	10,090/7.9%
PACIFIC PRESBYTERIAN	341	78,641/8.8%	7.7	10,249/8.0%
ST. FRANCIS	362	58,823/6.6%	7.9	7,403/5.8%
ST. LUKES	260	42,151/4.7%	5.6	7,577/6.0%
ST. MARY'S	555	92,527/10.3%	9.1	10,215/8.0%
SAN FRANCISCO GENERAL	**582**	**137,319/15.3%**	**6.8**	**19,988/15.7%**
SHRINERS HOSPITAL	70	7,900/0.9%	22.7	348/0.3%
UNIVERSITY OF CALIFORNIA	560	137,773/15.4%	7.2	19,096/15.0%

from West Bay Hospitals Patient Discharge Study, 1985, by Patient Data System.

NUMBER OF DISCHARGES BY SERVICE

INSTITUTIONAL OVERVIEW

This table indicates by service the number of patients discharged by San Francisco General in the fiscal year 1986-1987.

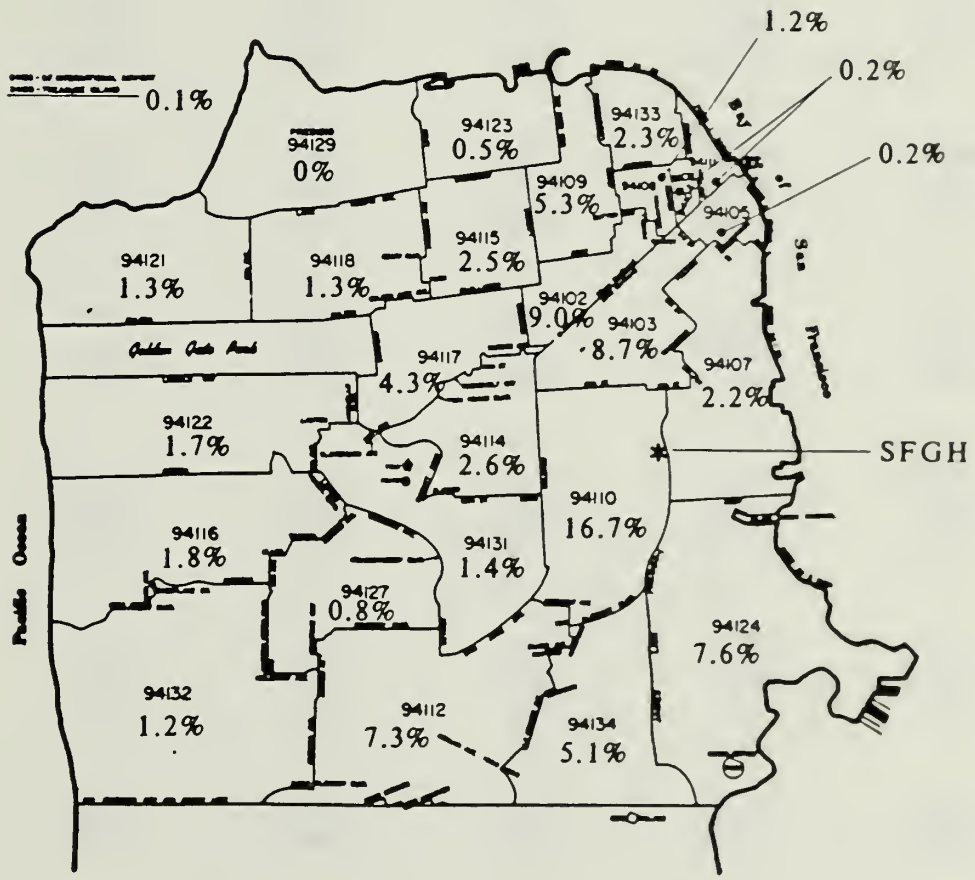
	NUMBER OF DISCHARGES	PERCENTAGE OF TOTAL PATIENTS
MEDICAL	4,903	23.00%
SURGICAL	8,072	37.87%
CRITICAL CARE	450	2.11%
OBSTETRICS/GYNECOLOGY	2,853	13.38%
PEDIATRICS	1,380	6.47%
PSYCHIATRY	1,589	7.45%
NURSERY	2,068	9.70%
TOTAL	21,315	100.00%

PATIENT ORIGIN BY ZIP CODE

INSTITUTIONAL OVERVIEW

This map indicates, by zip code, the origin of all patients treated at San Francisco General Hospital in 1985. Not surprisingly, most of the patients originate from the neighborhoods closest to the Hospital.

The largest group, 16%, are from the Mission District (zip code 94110). The Civic Center (94102), South of Market (94103), Bayview (994124), Excelsior (94112), and Visitacion Valley (94134) districts are the origin for 38% of the patients.



An additional 2.3% of the patients are from South Bay Counties, and 0.4% from North Bay Counties.

from West Bay Hospitals Patient Discharge Study, 1985, by Patient Data System.

UTILIZATION STATISTICS — *INSTITUTIONAL OVERVIEW*

Utilization of San Francisco General Hospital has risen steadily in the past five years. This table summarizes key utilization indicators since 1982.

	FY 1986-87	FY 1985-86	FY 1984-85	FY 1983-84	FY 1982-83
PATIENT DAYS					
Total	140,999	134,405	130,689	130,580	111,840
Nursery	8,375	7,676	7,740	7,869	6,484
Grand Total	149,374	142,081	138,429	138,449	118,324
AVERAGE DAILY CENSUS					
Total	386.30	368.23	358.05	357.75	306.41
Nursery	22.95	21.03	21.21	21.56	17.76
Grand Total	409.24	389.26	379.26	379.31	324.18
ADMISSIONS					
Total	19,450	19,263	18,856	19,554	16,294
Nursery	2,078	1,984	2,012	1,944	1,604
Grand Total	21,528	21,247	20,868	21,498	17,898
DISCHARGES					
Total	19,428	19,233	18,848	19,543	16,294
Nursery	2,071	2,000	2,012	1,933	1,608
Grand Total	21,499	21,233	20,860	21,476	17,767
DISCHARGE PT DAYS					
Total	140,880	133,375	130,934	128,896	110,737
Nursery	8,366	7,672	7,784	7,774	6,813
Grand Total	149,246	141,047	138,718	136,670	117,550
AVERAGE LENGTH OF STAY					
Total	7.25	6.93	6.95	6.60	6.85
Nursery	4.04	3.84	3.87	4.02	4.24
Grand Total	6.94	6.64	6.65	6.36	6.62
OCCUPANCY					
Staffed Beds	90.94%	90.53%	N/A	N/A	N/A
Licensed Beds	70.32%	66.88%	65.16%	65.17%	55.70%
EMERGENCY DEPT.					
# Registrations	83,559	82,167	84,613		
# Admissions	11,748	11,687	11,033		
E.D. Admits as % of					Not Available
Total Hosp Admits	60.40%	60.67%	58.51%		
OUTPATIENT DEPT.					
Hosp Based Clinic	283,799	259,191	227,326		
Satellite Clinics	53,677	51,769	55,015		
Grand Total	337,476	310,960	282,341		

EMPLOYEE ORIGIN AND CHARACTERISTICS

INSTITUTIONAL OVERVIEW

EMPLOYEE POPULATION

According to current payroll figures, SFGH's employee population includes of 1,200 employees of the University of California, San Francisco and 2,700 employees of the City and County of San Francisco, and totals approximately 4,000 persons. The daily total is approximately 3,300 persons.

EMPLOYEE ORIGIN

The majority of SFGH employees are from San Francisco and from all parts of the City. Employees from the Peninsula and the East Bay comprise the next largest employee group.

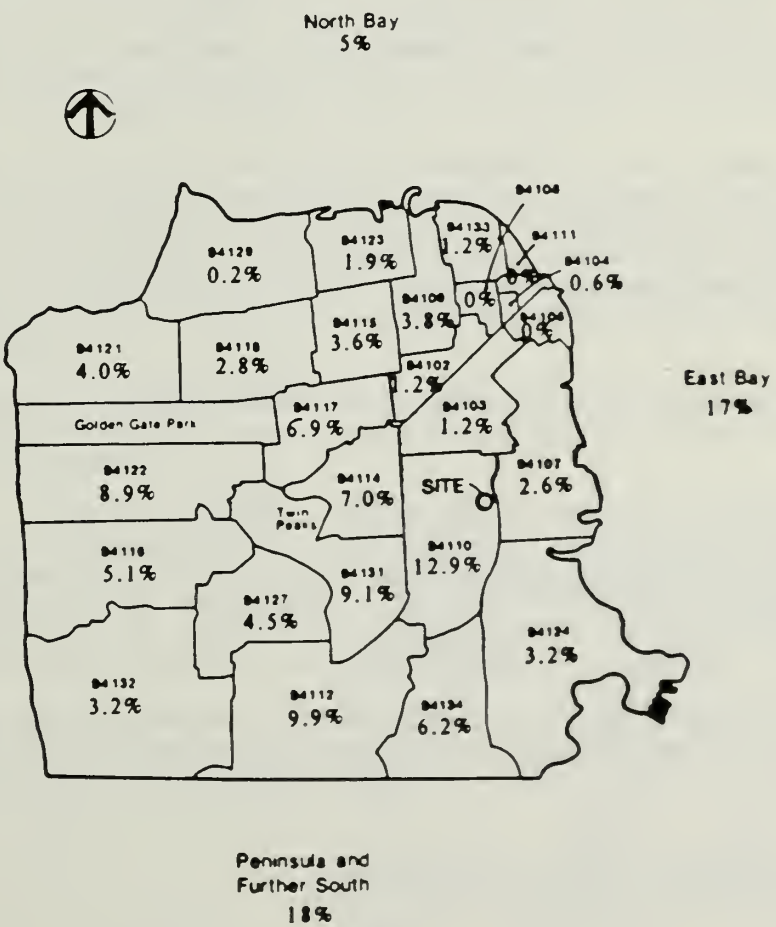
JOB CATEGORIES

Employee jobs can be divided into the following categories and approximate percentages:

25%	office workers	12%	physicians
18%	nurses	5%	professors/researchers
15%	technicians	5%	service staff
12%	administrators	8%	other

WORK SHIFTS

The hospital has six defined work shifts including a standard work day, nursing shifts and 12-hour shifts. 70% of the employees work during these designated times. The remaining 30% work odd shifts that total less than 40 hours per week. About 10% of the employees work rotating shifts that change weekly.



AFFIRMATIVE ACTION PROGRAM — *INSTITUTIONAL OVERVIEW*

City and County of San Francisco — Department of Public Health

POLICY STATEMENT

It is the policy of the Department of Public Health to afford equal opportunity for employment to all individuals regardless of race, religion, sex, national origin, ethnicity, age, physical handicap or other disabilities, political affiliation, or sexual orientation. However, experience has demonstrated that a policy of non-discrimination by itself is not sufficient to erase within the foreseeable future the present effects of past discrimination imposed on women and minorities who have historically suffered from systematic discrimination. Therefore, the Department of Public Health will take affirmative steps to:

1. Increase the number of minorities and women employees in classifications where they are presently under-represented by implementing, wherever applicable, the action steps embodied in the compliance agreement entered into by the City and County of San Francisco and the Office of Revenue Sharing.

2. Recruit, hire and promote in all job classifications without regard to race, religion, sex, national origin, ethnicity, age, physical handicap or other disabilities, political affiliation, or sexual orientation except in the case of a bona-fide occupational qualification.

3. Ensure that personnel actions with reference to such matters as classifications, compensation, benefits, transfers, layoffs, return from layoffs, disciplinary measures, training and education through tuition reimbursement will be administered without regard to race, religion, sex, national origin, age, physical handicap or other disabilities, political affiliation or sexual orientation.

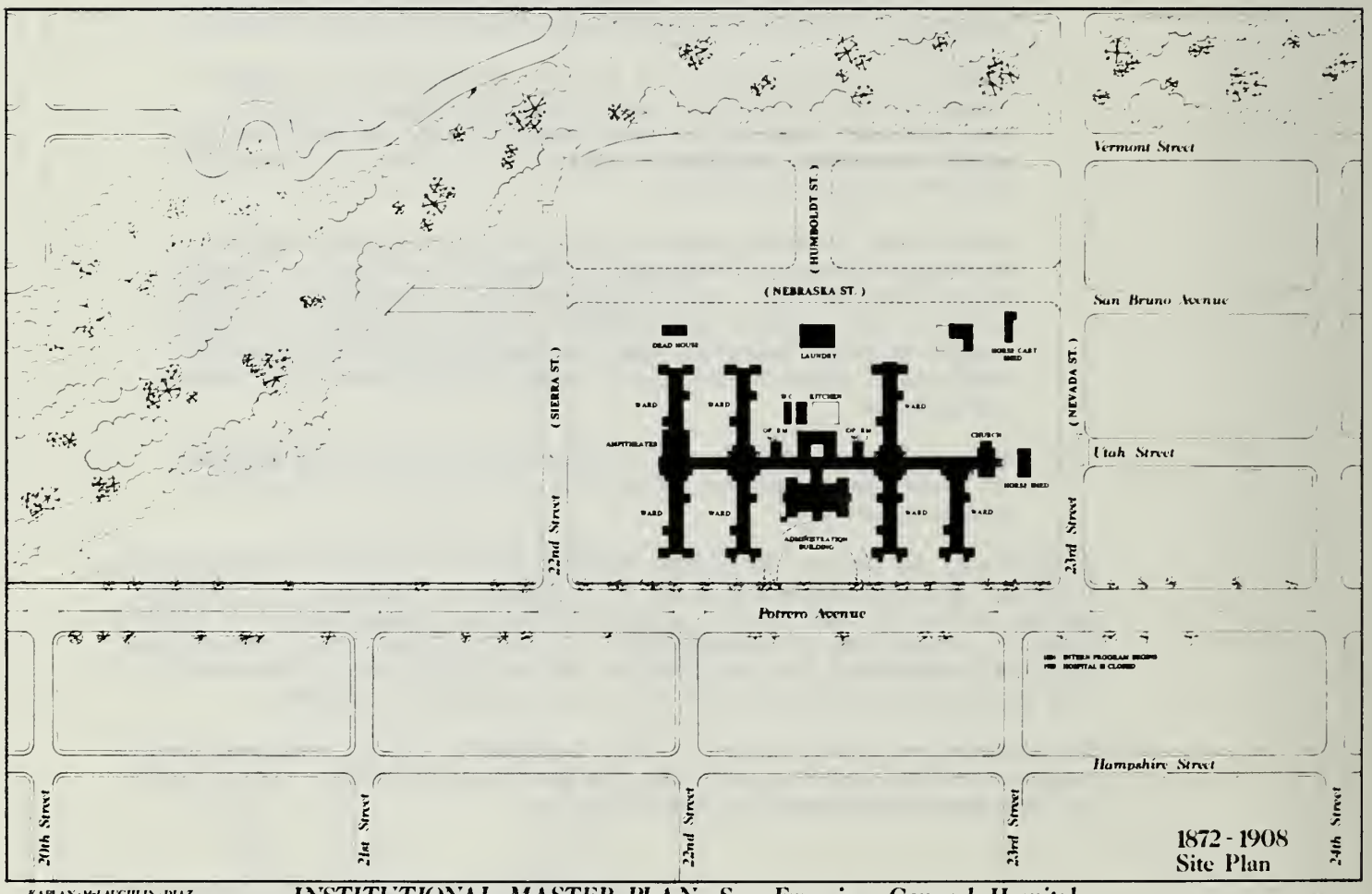
4. Ensure that the Department is free of any bias in the delivery of health care services to persons in the City and County of San Francisco.

In addition, all Deputy Directors, Program Chiefs, Hospital Administrators, managers, and line supervisors are accountable to the Director of Health for the implementation of this policy within the organizational Divisions/Units for which they are responsible. The Affirmative Action Coordinator shall be responsible for coordinating and monitoring the implementation of this policy and shall report to me on the Department's progress.

The Affirmative Action Policy of this Department will be evaluated on the basis of results and compared with the specific affirmative action goals for the entire Department of Public Health.

MERVYN F. SILVERMAN, M.D., M.P.H.
Director of Health

THE COUNTY HOSPITAL IN 1872



KAPLAN / McLAUGHLIN · DIAZ
Architects Planners
Gordon H Chong & Associates
Associate Architects

INSTITUTIONAL MASTER PLAN · San Francisco General Hospital
City and County of San Francisco

HISTORICAL OUTLINE

INSTITUTIONAL OVERVIEW

San Francisco General Hospital has a very colorful history. The following chronology highlights the events that have shaped that history.

1854 The first independent City Hospital in which the destitute could receive care was located in a former brick school house near San Francisco and Stockton Streets. A series of wooden shacks developed around this structure. The complex became known as the "Old County Hospital" which, according to a prominent physician of the time, "packed in, fed, lodged and purged 400 sick people in a chicken coop occupying a 137-square-foot area".

1867 A large almshouse was built near Lake Honda to accommodate the overflow of patients. On the same grounds, a four-room isolation hospital, known as the "Pest House," was opened to house smallpox patients. The Pest House was operated by a matron and three assistants who were quarantined and allowed to leave only once or twice a month. In spite of these new facilities, the need for additional and more up-to-date facilities continued to grow.

1872 Construction of a new County Hospital at the present Potrero location was completed. The Hospital was a collection of quaint wood frame structures that featured two-story open wards along a long corridor and a number of outlying support buildings. The complex included two primitive operating rooms and an autopsy area. There were no laboratories. Intended as a temporary structure, the Hospital remained in use until 1908.

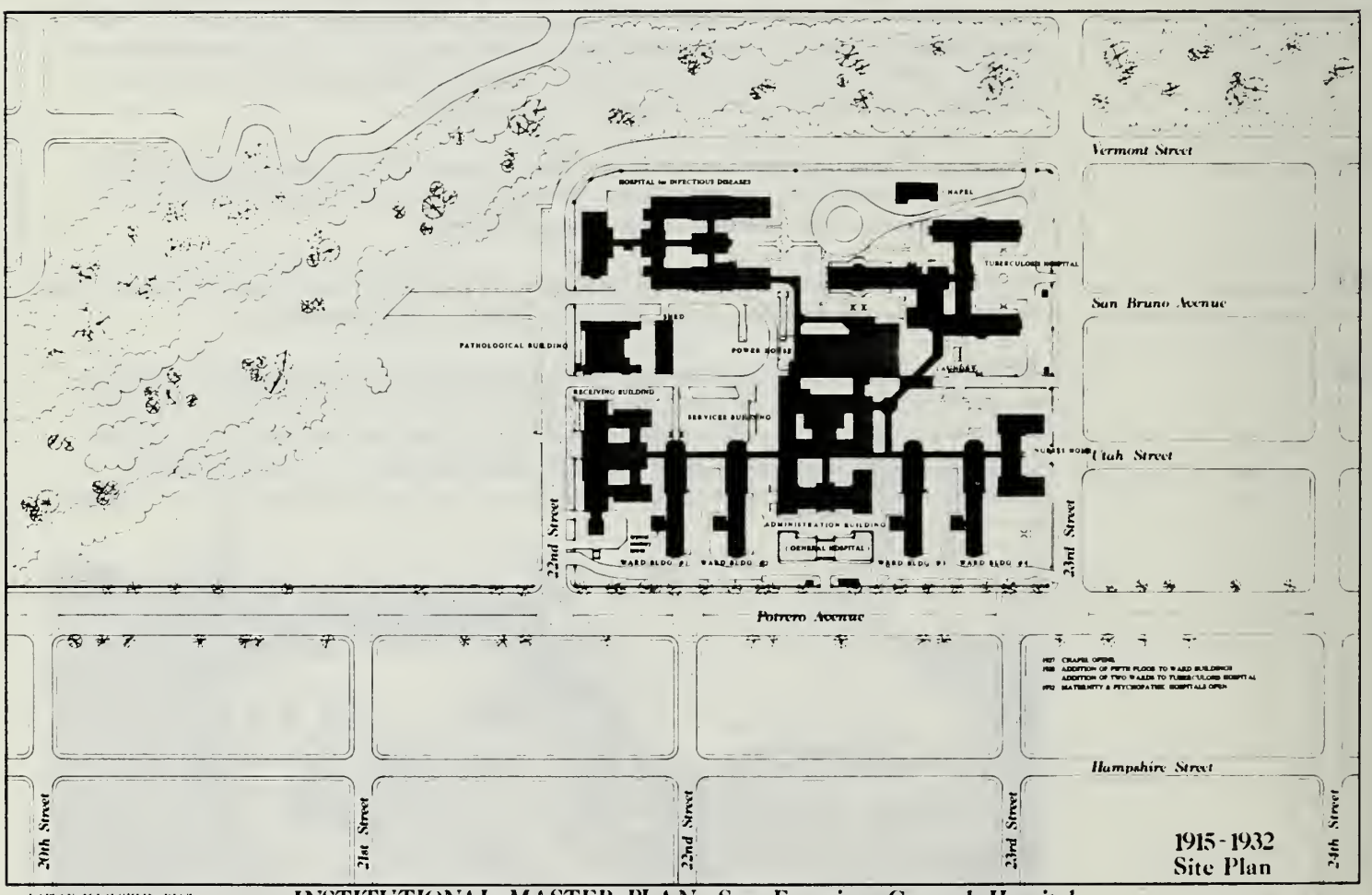
1884 University of California participation at the Hospital began with the introduction of six UC graduates as interns for a one-year period. They received room and board but no pay. Not long after students from Stanford joined the intern program.

1906 The Hospital was spared in the Great Earthquake but was fraught with numerous scandals and problems of its own, including severe infestation by rats and political neglect.

1908 The Hospital was closed by order of the Board of Supervisors after two epidemics of plague - the last epidemic having been traced directly to rats living within the buildings. The patients were moved to the old race track at the Ingleside Jockey Club and were bedded in the stalls. Operating rooms and other facilities were set up in the grandstand. In April, the sixteen buildings comprising the Potrero complex were doused with gasoline and burned to the ground.

TEMPORARY HOSPITAL
AT INGLESIDE JOCKEY CLUB

THE HOSPITAL CAMPUS FROM 1915 TO 1930



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HISTORICAL OUTLINE — *INSTITUTIONAL OVERVIEW*

1915

With the acquisition of two parcels of land directly to the east the new County Hospital was opened on an expanded site. The Hospital consisted of three main institutions: 1) the General Hospital, 2) the Hospital for Infectious Diseases and 3) the Tuberculosis Hospital. The new facility was considered one of the most modern in the country. Three medical/surgical ampitheatres and up-to-date research facilities attracted outstanding physicians and house staff and provided opportunities for excellent medical work.

Designed by City Architect Newton J. Tharp, the new Hospital was developed on the corridor/pavilion concept where the buildings were connected by a main corridor that provided movement from one building to the next without exposure to the elements. The buildings were steelframed structures with reinforced concrete floors and roofs. Designed in a Neo-Italian Renaissance style, the buildings exhibited beautifully patterned red brick exteriors with terra cotta and marble trim and ornamentation. A system of underground tunnels provided the distribution of hot and cold water, steam and other necessities to the buildings as well as the transportation of bodies to the morgue with the least amount of detection. Electric elevators and the most advanced telephone, lighting, heating and ventilating systems were installed.

The General Hospital complex consisted of ten buildings: the Administration Building, four Ward Buildings, the Receiving Building, the Pathology Building, the Nurses Home, the Services Building, and the Laundry and Power House. Each ward building contained four wards, a roof garden with penthouse and a basement. A special feature of these buildings was the sanitary tower which housed the toilets, baths, wash basins, clothes chutes, etc... The large open ward system was still in effect and provided the Hospital with a bed capacity of 770.

1927

A chapel was constructed on the east side of the property adjacent to the Tuberculosis Hospital.

1928

The addition of a fifth floor to the Ward Buildings and two wards to the Tuberculosis Hospital increased the bed-capacity from 770 to 1000. To meet this expansion, the volunteer staff grew as well and, by 1930, the Hospital had a house staff of 70 physicians, a volunteer staff of 150, and a faculty staff from UC and Stanford.

1932

The site boundaries were extended again - this time to the north. The Psychopathic and Maternity Hospitals were opened on this newly acquired land. They conformed in construction to the original Hospital buildings; however, the design was more in keeping with the art deco style.

ADMINISTRATION BUILDING

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City and County of San Francisco

HISTORICAL OUTLINE

INSTITUTIONAL OVERVIEW

1934 Miscellaneous repairs and improvements including excavating, roofing, plastering, painting, electrical work, and the installation of skylights were undertaken.

1939 Two garages were built and a number of parking areas were developed on the site.

1940's Existing facilities were continually reorganized and improved.

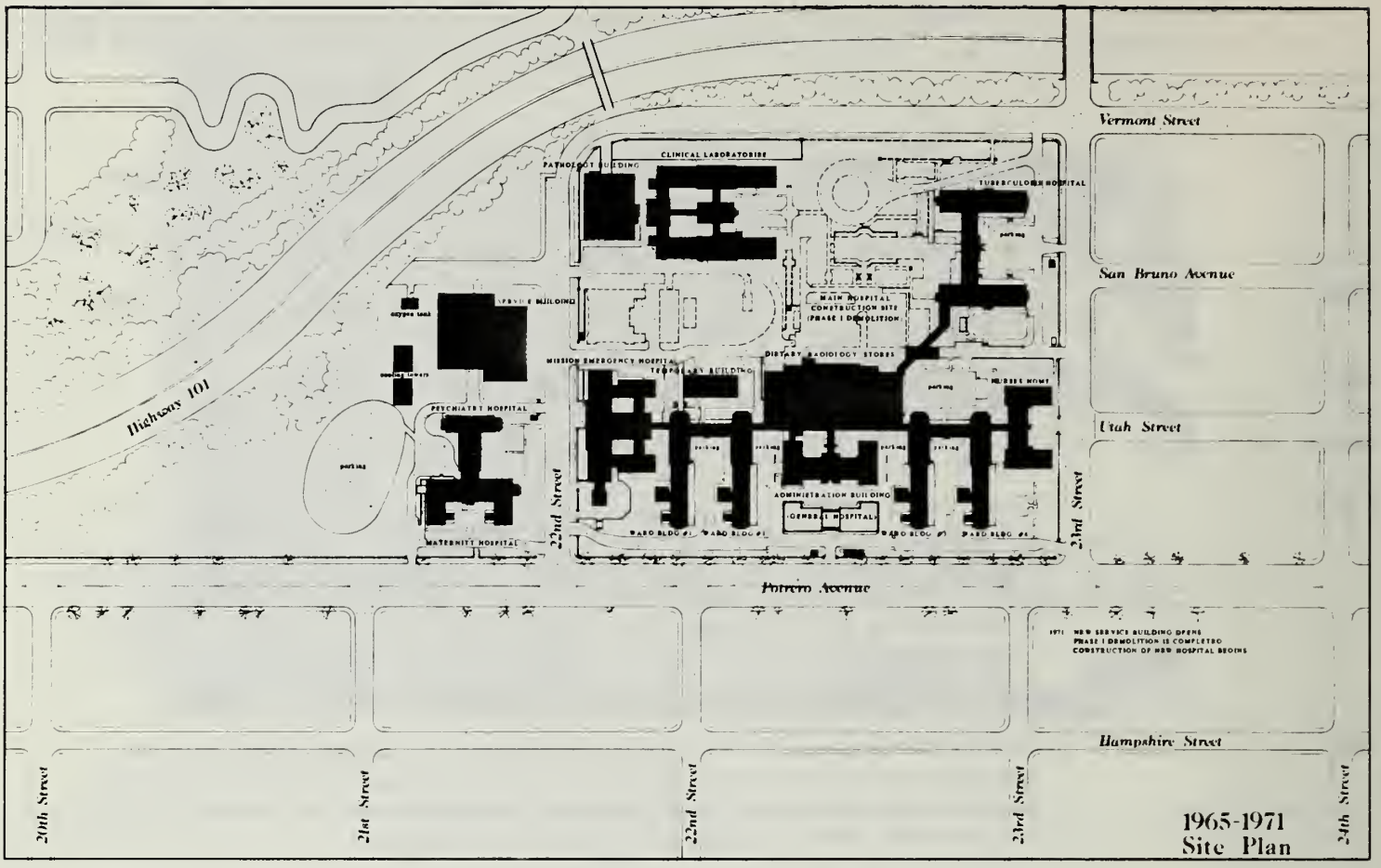
1954 Under reports that SFGH was in violation of various safety standards and suffering from overall deterioration, a large bond issue was passed by the voters of San Francisco to modernize the twenty-one existing buildings. Twenty-seven separate improvement projects got underway. A full-height connection was built between Ward Buildings 10 and 20 and Ward Buildings 30 and 40 at the east end of the buildings. Other work included: the installation of new elevators, fire escapes and sprinklers (in the basement storage areas); remodeling of the Maternity Building; replacement of hot water lines; and an overall paint job.

1959 The City and County of San Francisco and the University of California signed a formal agreement that provided house staff for the Hospital in exchange for research and teaching facilities for the University. Mission Emergency Hospital (formerly the Receiving Building) was remodeled. Stanford moved its medical school to Palo Alto.

1965 A $34 million bond issue was passed by a 77 percent vote to build a modern medical facility. The new complex would meet the needs of a changing society, in particular: 1) increased numbers of indigent patients, 2) increased numbers of patients not qualifying for private hospitalization, 3) increased violence and more emergency cases, and 4) new problems of drug abuse, alcoholism, infections and mental illness.

A new Pathology Building was built in place of the North Wing of the Hospital for Infectious Diseases. The Hospital for Infections Diseases was converted into Clinical Laboratories.

50 BED OPEN WARD 1915 TO 1976



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HISTORICAL OUTLINE *INSTITUTIONAL OVERVIEW*

1971

The new Service Building (with parking deck) opened on the north side of the site and the old Service Building became the temporary location for Dietary, Radiology and Stores. Phase I of the demolition process was completed and construction of the new Hospital began.

The Hospital administrative staff had expanded from 2 in 1960 to 30 by 1974. The full-time University staff had increased from 10 to 91, covering all types of medical service. A Dean's office had been established at the Hospital.

1976

The new Hospital opened on the site formerly occupied by the north wing of the Tuberculosis Hospital, the Laundry and Power House, and the Chapel. The new medical complex incorporated modern facilities with advanced mechanical and electrical systems. The construction was poured-in-place concrete with post-tensioned stressed steel cables. The exterior surfaces were sandblasted to allow for low-maintenance of the structure.

Three large canopied entrances dominate the overall design and provide separate access and flow for outpatients, emergency patients, and staff and visitors. Above these canopies are landscaped terraces. A primary feature is the "stacking" of all emergency and critical care departments, one above the other, and the connection of these services with specially controlled high-speed elevators and conveyor systems. A network of underground tunnels connects the main hospital to the vital utilities of the Service Building.

The new facility was equipped with modern heating, ventilating and air-conditioning systems. A sophisticated system for the circulation of food, supplies and waste was established as well as a communications center. The Hospital met all life safety, seismic and security requirements.

The open ward model with a 50-bed capacity was replaced by private rooms. The new facility had a 582-bed capacity. Public art enhanced the interiors as wells as the grounds.

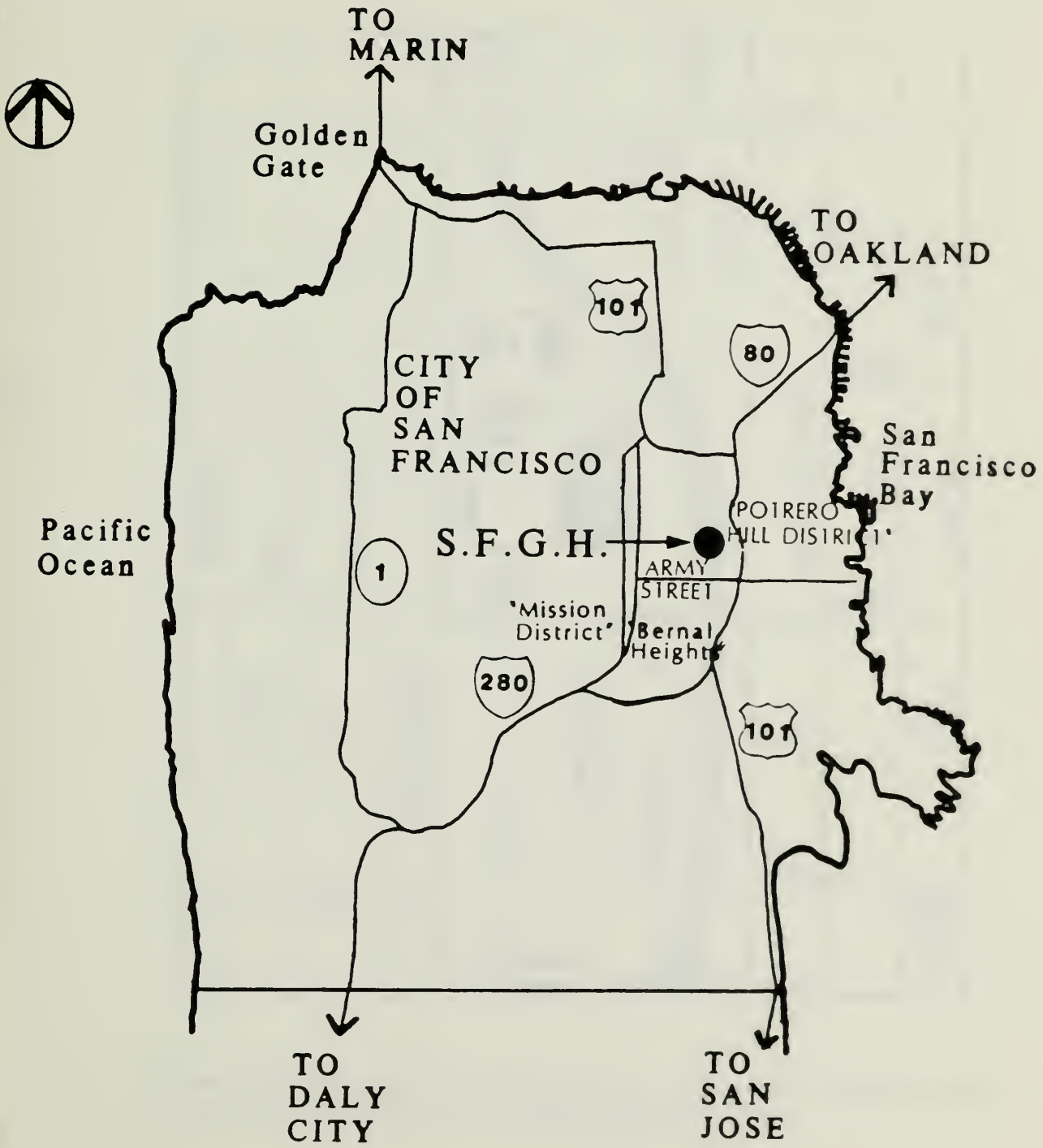
The old Administration Building was demolished to allow the new Hospital to front Potrero Avenue. The Ward Buildings were remodeled to house various support units (a library, billing and accounting, building and grounds, and shops) as well as several large research units paid for by private donors (Gladstone, Gallo, Rosalind Russell and Koret).

Finally, the old Services Building was torn down and the parking areas and landscaping were completed.

LOCATION AND CAMPUS DESCRIPTION *FACILITIES OVERVIEW*

LOCATION

San Francisco General Hospital is located at the juncture of the Mission and Potrero Hill Districts of San Francisco. It is accessed from Highway 101 by the Army Street exit.

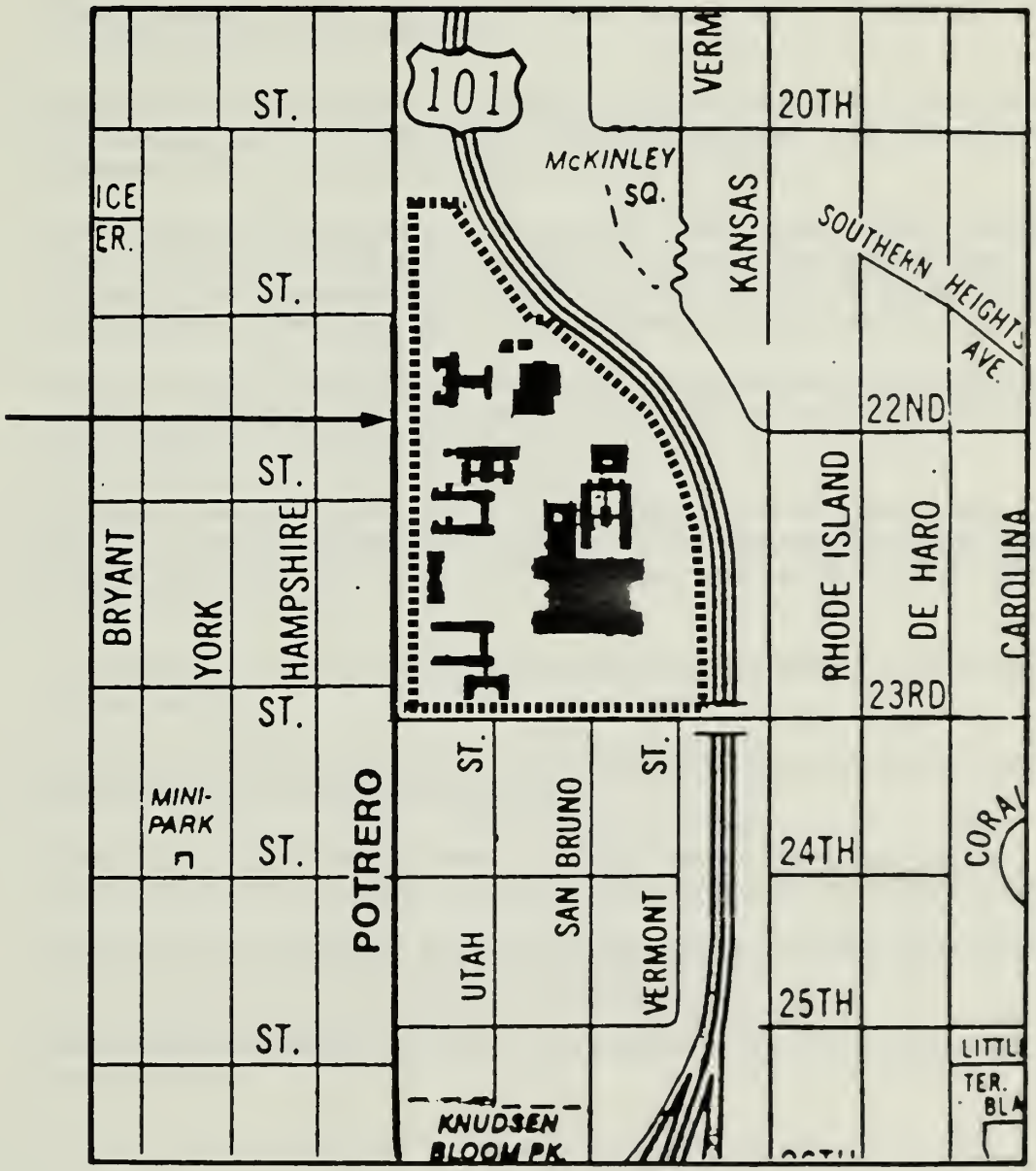


LOCATION AND CAMPUS DESCRIPTION *FACILITIES OVERVIEW*

CAMPUS DESCRIPTION

The Hospital campus is bounded by Highway 101 to the north, 23rd Street to the south, Vermont Street and Highway 101 to the east, and Potrero Street to the west.

SFGH MEDICAL CENTER CAMPUS



Ten separate buildings comprise the Hospital campus. They include the newer main hospital building as well as a collection of older buildings dating back to 1915.

Hard Edge Of Campus

Noise Buffer

Truck/Service Access

Vermont Street

San Bruno Avenue

Utah Street

Main Hospital

300

200

100

3

A

B

C

D

E

Service Building

Primary Open Space

Primary Circulation

1a

1b

1c

1

10

20

30

40

9

90

80

Highway 101

Primary Open Space

Noise Buffer

E

Rock Grotto

View To Twin Peaks

Primary Open Space

Hard Edge Of Campus

Bus Stop

Bus Stop/Primary Pedestrian Access Onto Campus

Primary Auto Intersection

Potrero Avenue

Campus Identity

(Progression Of Original Buildings & Open Space)

NOTE:
Numbers and letters represent the various buildings on the hospital campus. (see "Building Description")

Hampshire Street

20th Street

21st Street

22nd Street

23rd Street

24th Street

SITE ANALYSIS PLAN

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Architect Planner

Gordon H Chong & Associates
Associate Architect

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City and County of San Francisco

CAMPUS CIRCULATION AND PARKING

FACILITIES OVERVIEW

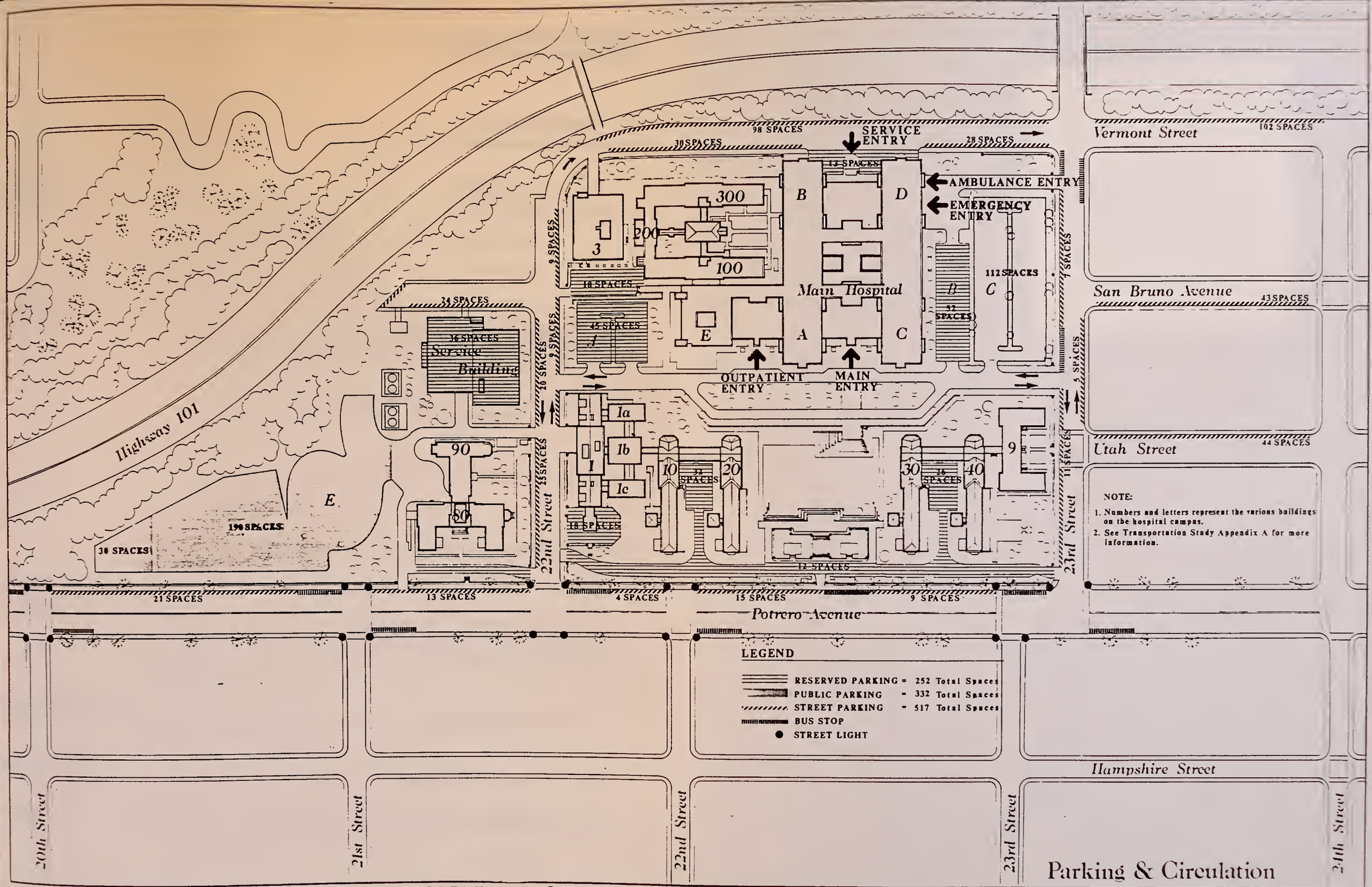
CAMPUS CIRCULATION

The arrows on the accompanying Parking and Circulation Plan indicate both the traffic circulation patterns and the main building access points both on and directly adjacent to the hospital campus. The location of street lights and bus stops is also shown.

PARKING

Available parking on and immediately surrounding the hospital campus is represented on the plan. Parking is broken down into types (reserved, public and on-street) and the number of parking spaces within each category.

Additional information concerning circulation and parking can be found in this document under the transportation study.



Parking & Circulation

INSTITUTIONAL MASTER PLAN · San Francisco General Hospital

City and County of San Francisco

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Architects-Planners
Gordon H. Chong & Associates
Associate Architects

ZONING REQUIREMENTS

FACILITIES OVERVIEW

OCCUPANCY (Uniform Building Code)

I	(INSTITUTIONAL):	DIVISION 1	- Hospital - Medical/Dental Office and Ambulatory Care Clinic
		DIVISION 3	- Mental Hospital
B	(BUSINESS):	DIVISION 2	- Office Building

OFF-STREET PARKING SPACES REQUIRED

I-1 Hospital - 1 for each 8 beds excluding bassinets or for each 2,400 SF of gross floor area devoted to sleeping rooms, whichever results in the greater requirement, provide that these requirements shall not apply if the calculated number of spaces is no more than two.

Medical/Dental Office and Ambulatory Care Clinic - 1 for each 300 SF of occupied floor area, where the occupied floor area exceeds 5,000 SF.

I-3 Mental Hospital

1 for each 8 beds or for each 2,400 GSF devoted to sleeping rooms, whichever is greater.

B-2 Office Building

1 for each 500 SF of occupied floor area, where the occupied floor area exceeds 5,000 SF.

MINIMUM DIMENSIONS FOR REQUIRED OFF-STREET PARKING

Every required off-street parking space shall have a minimum area of 160 SF exclusive of driveways, aisles, and maneuvering area. For 4 required spaces 1 may be a compact car space. For more than 4 required spaces, 1 of each 2 spaces may be a compact car space. Every compact car space shall have a minimum area of 127.5 SF and shall be specifically marked and identified as a compact car space.

HANDICAPPED PARKING SPACES REQUIRED

For each 25 off-street parking spaces provided, one such space shall be designed and designated for handicapped persons.

BICYCLE PARKING SPACES REQUIRED

For each 20 off-street parking spaces provided one space shall be provided for parking of a bicycle.

P-DISTRICTS

A Public Use District applies to land that is owned by a governmental agency and has some form of public use, including open space.

ZONING REQUIREMENTS

FACILITIES OVERVIEW

PRINCIPAL USES PERMITTED, P-DISTRICT

Public structures and uses of the City and County of San Francisco, and of other governmental agencies that are subject to regulation by this code when in conformity with the Master Plan and the provisions of other applicable codes, laws, ordinances and regulations.

HEIGHT LIMIT

105 feet with the following exemptions:

1. Mechanical equipment and appurtenances necessary to the operation or maintenance of the building or structure itself, exemption limited to the top 16 feet of such features.

2. Elevator, stair mechanical penthouses, fire towers, exemption limited to the top 16 feet of such features.

3. Railings, parapets and catwalks with a maximum height of 4 feet.

4. Unroofed recreation facilities with open fencing, including tennis and basketball courts at roof level.

5. Unenclosed seating areas limited to tables, chairs and benches, and related windscreens, lattices and sunshades with a maximum height of 10 feet.

BULK LIMIT

District E has the following requirements:

1. Achievement of a distinctly better design than would be possible with strict adherence to the bulk limits.

2. Development of a building or structure with widespread public service benefits and significance to the community at large, where compelling functional requirements of the specific building or structure make necessary such a deviation.

Deviations from the bulk limits shall be permitted upon approval by the City Planning Commission according to the procedures for conditional use.

HEIGHT RESTRICTIONS ON STRUCTURES: RECREATION AND PARK COMMISSION PROPERTY

Structures must not exceed 40 feet in height or cast shade or shadow upon property for any longer than the first hour after sunrise and/or the last hour before sunset.

ZONING REQUIREMENTS *FACILITIES OVERVIEW*

INSTITUTIONAL MASTER PLAN

Must include the development plans of the institution for a future period of not less than 10 years and the physical changes in the institution projected to be needed to achieve those plans. Any plans for physical development during the first 5 years shall include the site area, ground coverage, building bulk, approximate floor area by function, off-street parking, circulation patterns, areas for land acquisition and timing for the proposed construction. A description and analysis of the following should be provided:

1. The conformity of proposed development plans to the Comprehensive Plan of the City and County of San Francisco, and to any neighborhood plans on file with the Department of City Planning.

2. The anticipated impact of any proposed development by the institution on the surrounding neighborhood, including but not limited to the effect on existing housing units, changes in traffic levels and circulation patterns, transit demand and parking availability, and the character and scale of development in the surrounding neighborhood.

3. Any alternatives which might avoid, or lessen, adverse impacts upon the surrounding neighborhood, including location and configuration alternatives, the alternative of no new development, and the approximate costs and benefits of each alternative.

4. The mitigating actions proposed by the institution to lessen adverse impacts upon the surrounding neighborhood.

NEIGHBORHOOD ZONING REQUIREMENTS

FACILITIES OVERVIEW

PLANNING CONTROLS

Limitations on development are outlined in part by the Zoning Regulations of the City and County of San Francisco. Permissible land uses are established for specific areas of the City on the City Zoning Map. Further restriction is imposed on permissible land uses by additional requirements, including building height and bulk limitations.

LAND USE ZONES

The SFGH campus exists within a public use (P) District. This means that the land is owned by a governmental agency and may be used for public structures, open space or other uses of the City and County of San Francisco.

The property adjacent to the hospital campus is zoned predominately for residential house (RH), including duplex and 3-family units. A neighborhood commercial district (NCD) is located in the area on 24th Street and Mission and imposes various regulations on the adjacent districts within a 150-foot radius of its boundaries. A residential mixed-use district (RM) exists to the west of SFGH.

LAND USE ZONES

SYMBOL	DISTRICT	DENSITY
P	Public Use	-
RH-2	Residential, House	2-Family
RH-3	Residential, House	3-Family
RM-1	Residential, Mixed-Use	One Dwelling Unit per 600 SF of lot area
NCD	Neighborhood, Commercial	One Dwelling Unit per 600 SF of lot area

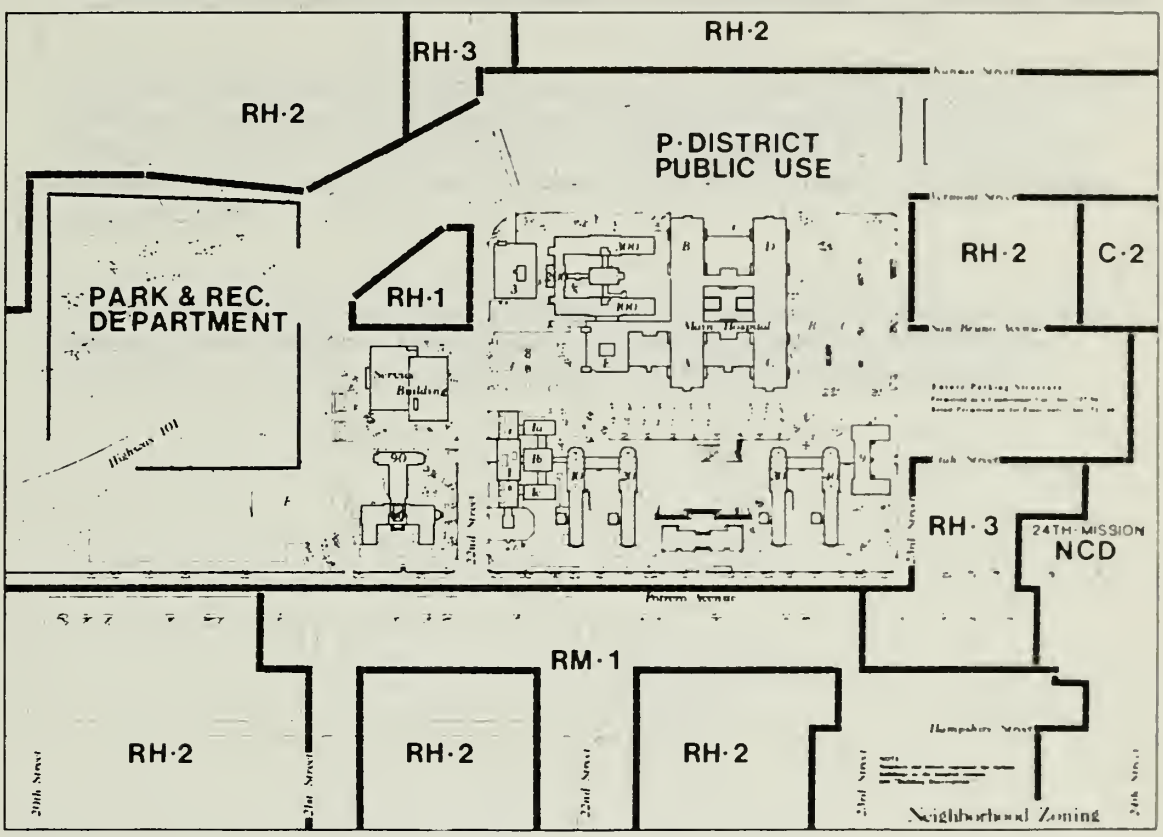
HEIGHT AND BULK DISTRICTS

SFGH property exists within height and bulk district 105-E. The adjacent properties fall within various districts including 40-X, 65-A and 105-E. The table below indicates the restrictions for each district.

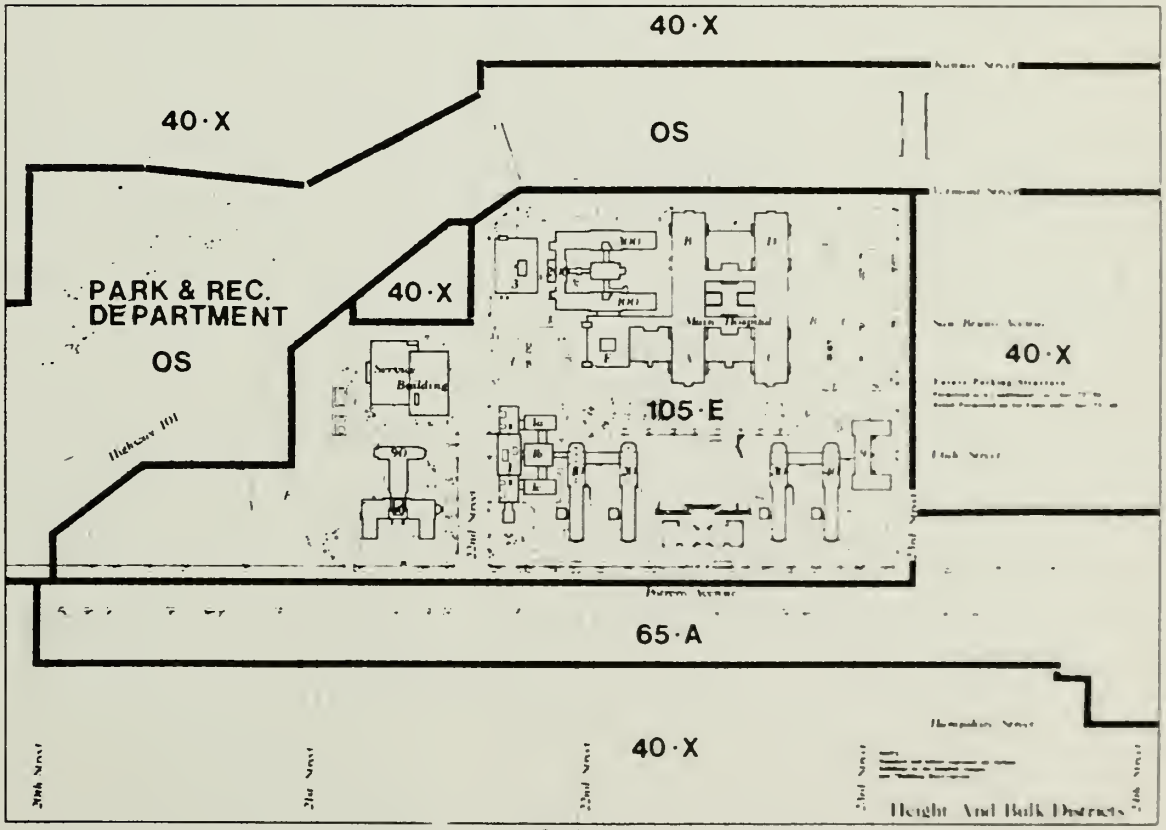
HEIGHT AND BULK DISTRICTS

SYMBOL	MAXIMUM BUILDING HEIGHT (Feet)	HEIGHT ABOVE WHICH MAXIMUM DIMENSIONS APPLY (Feet)	MAXIMUM PLAN DIMENSION (Feet)	MAXIMUM DIAGONAL DIMENSION (Feet)
40-X	40	-	-	-
65-A	65	40	110	125
105-E	105	65	110	140

NEIGHBORHOOD ZONING



FACILITIES OVERVIEW



BUILDING DESCRIPTION

	MAIN HOSPITAL	SERVICE BUILDING	BUILDING 3	BUILDING 80/90	BUILDING 100/200/300	BUILDING 9	BUILDING 10/20	BUILDING 30/40	BUILDING 1/1A/1B/1C
PRESENT USE	Acute/Ambulatory Care	Service	Research	Ambulatory Care	Ancillary	Administration	Research/ Administration	Research/ Administration	Research
ARCHITECT	Stone, Marraccini & Patterson	Stone, Marraccini & Patterson	Maher & Martens, Architects	Martin Rist, Architect	Newton J. Tharp, City Architect	Newton J. Tharp, City Architect	Newton J. Tharp, City Architect	Newton J. Tharp, City Architect	Newton J. Tharp, City Architect
DATE COMPLETED	1976	1971	1965	1932	1915	1915	1915	1915	1915
MAJOR ALTERATIONS				1954: Exterior fire stairs added.			1928: Fifth floor wards added. 1954: Ext. fire stairs, connecting links added.	1928: Fifth floor wards added. 1954: Ext. fire stairs, connecting links added.	1928: Fifth floor wards added. 1954: Ext. fire stairs, connecting links added.
CONSTRUCTION TYPE	Poured-in-place concrete w/post-tensioned stressed steel cables.	Poured-in-place concrete w/both reinforced concrete and post-tensioned members.	Poured-in-place concrete w/ceramic veneer.	Exterior Walls: Unreinforced brick masonry. Floors and Roofs: Steel frame w/reinforced concrete. Clay tile roofing.	Exterior Walls: Unreinforced brick masonry. Floors and Roofs: Steel frame w/reinforced concrete. Clay tile roofing.	Exterior Walls: unreinforced brick masonry. Floors and Roofs: Steel frame w/reinforced concrete. Clay tile roofing.	Exterior Walls: Unreinforced brick masonry. Floors and Roofs: Steel frame w/reinforced concrete. Clay tile roofing.	Exterior Walls: Unreinforced brick masonry. Floors and Roofs: Steel frame w/reinforced concrete. Clay tile roofing.	Exterior Walls: Unreinforced brick masonry. Floors and Roofs: Steel frame w/reinforced concrete. Clay tile roofing.
BUILDING STYLE	"New Brutalis" Modern	Modern	Modern	Art Deco	Neo-Italian Renaissance	Neo-Italian Renaissance	Neo-Italian Renaissance	Neo-Italian Renaissance	Neo-Italian Renaissance
SPECIAL FEATURES	Terraces			Copper spandrels & ornamentation at North & South ends of building	Central courtyard building		Terra cotta clad bay windows at west end of building	Terra cotta clad bay windows at west end of building	Medical/Surgical Amphitheaters west
SHAPE	"L"-shaped	Rectangular	Rectangular	80: "U" shaped 90: "T" shaped	"E" shaped	"U" shaped	"U" shaped	"U" shaped	"E" shaped
GROSS SQUARE FEET*	617,400 sq. ft.	42,700 sq. ft.	40,500 sq. ft.	102,000 sq. ft.	89,300 sq. ft.	27,000 sq. ft.	97,700 sq. ft.	97,700 sq. ft.	65,875 sq. ft.
NUMBER OF STORIES	8	2 + parking deck	3	Bldg. 80: 6 w/partial 7th story. Bldg. 90: 5	3-w/1-story structure at center area	3	5	5	Bldg. 1: 3 w/4th story at center area. Bldgs.1a/1b/1c: 2

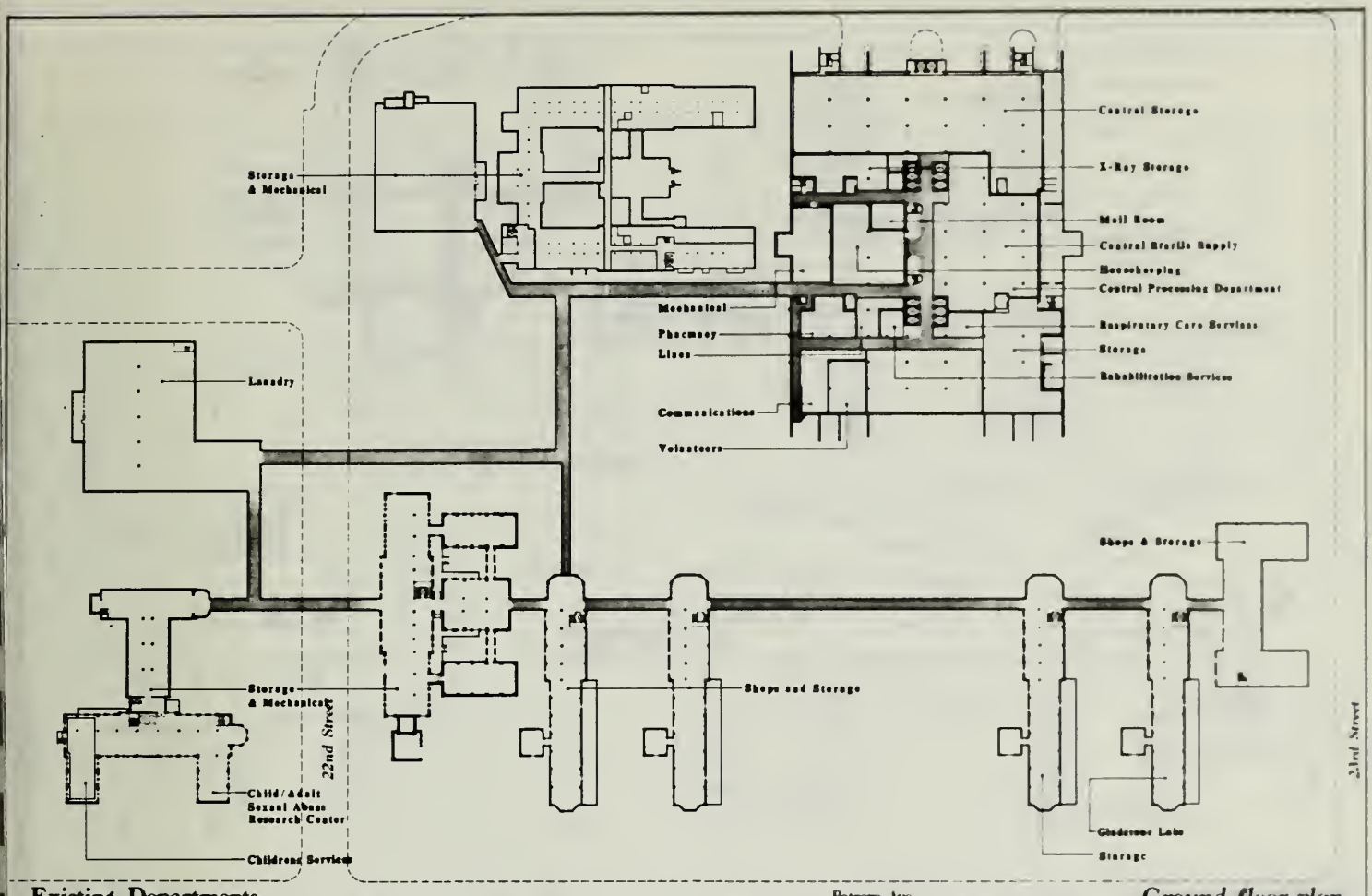
Note: Typically, the buildings have a full or partial basement and are interconnected by tunnels used for power and service distribution.

*GSF: Total area of the building measured from the outside of the exterior walls.

EXISTING FLOOR PLANS BY DEPARTMENT

FACILITIES OVERVIEW

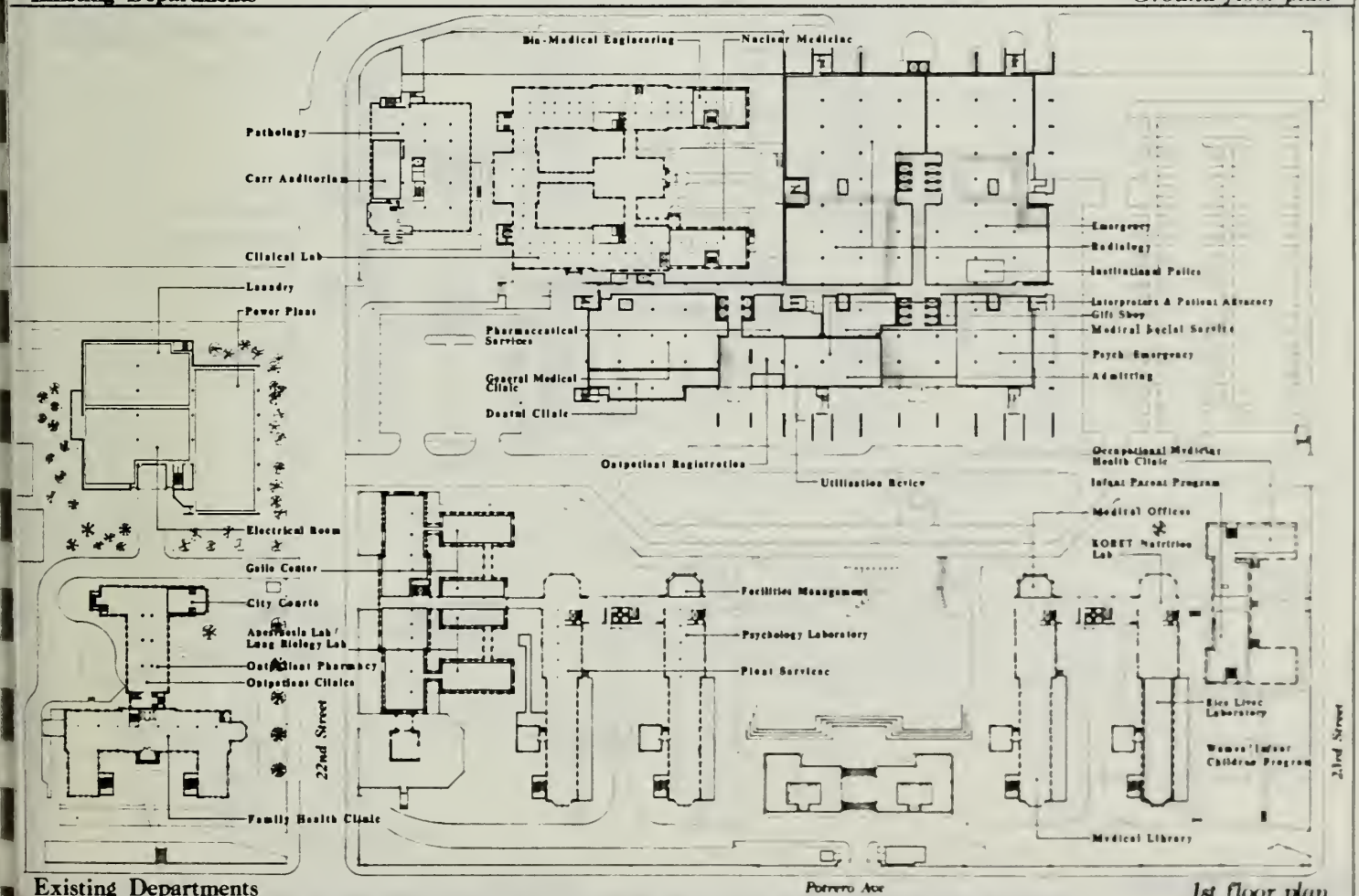
The following plans reflect the existing locations of hospital departments on a floor-by-floor basis.



Existing Departments

Potrero Ave

Ground floor plan



Existing Departments

Potrero Ave

1st floor plan

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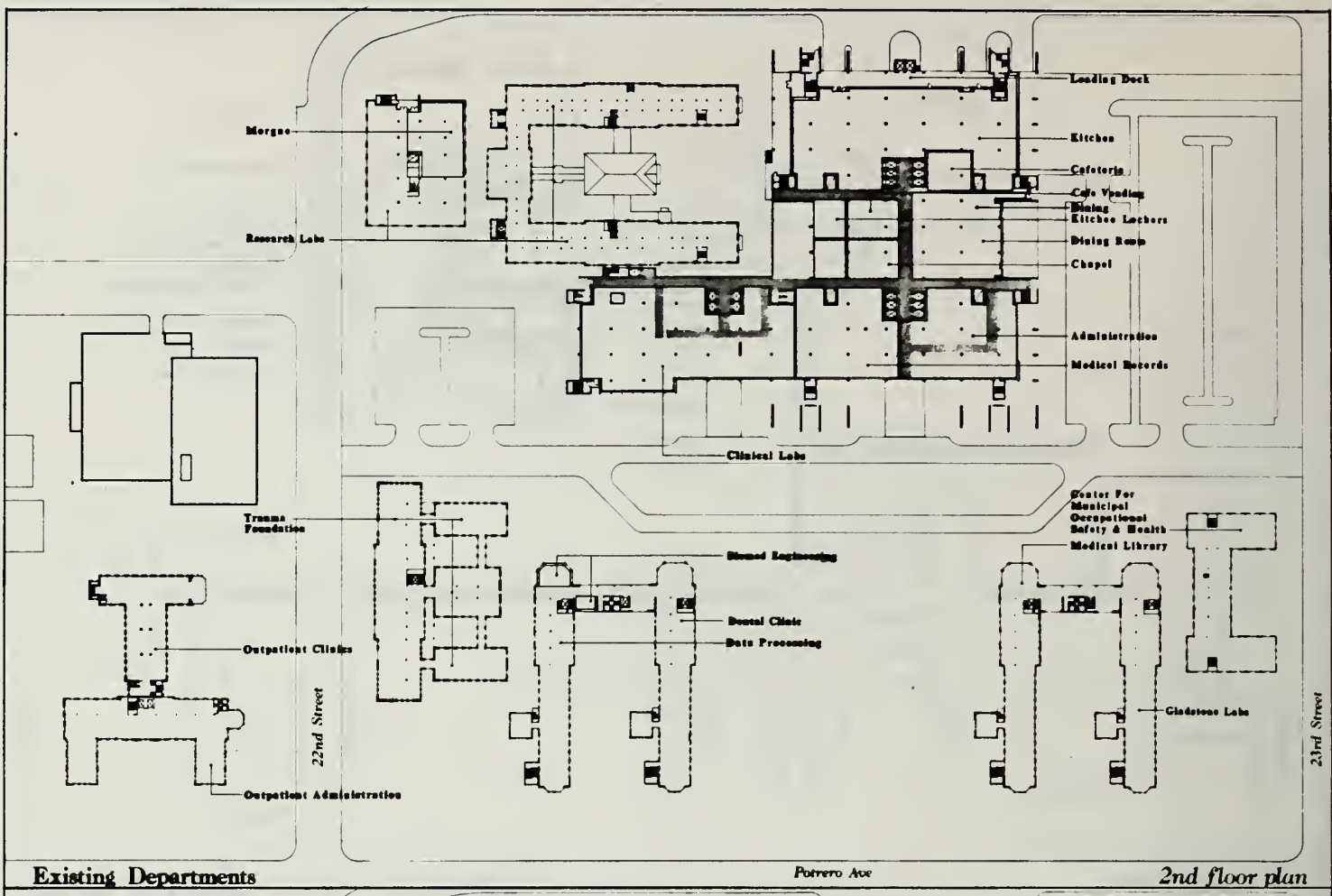
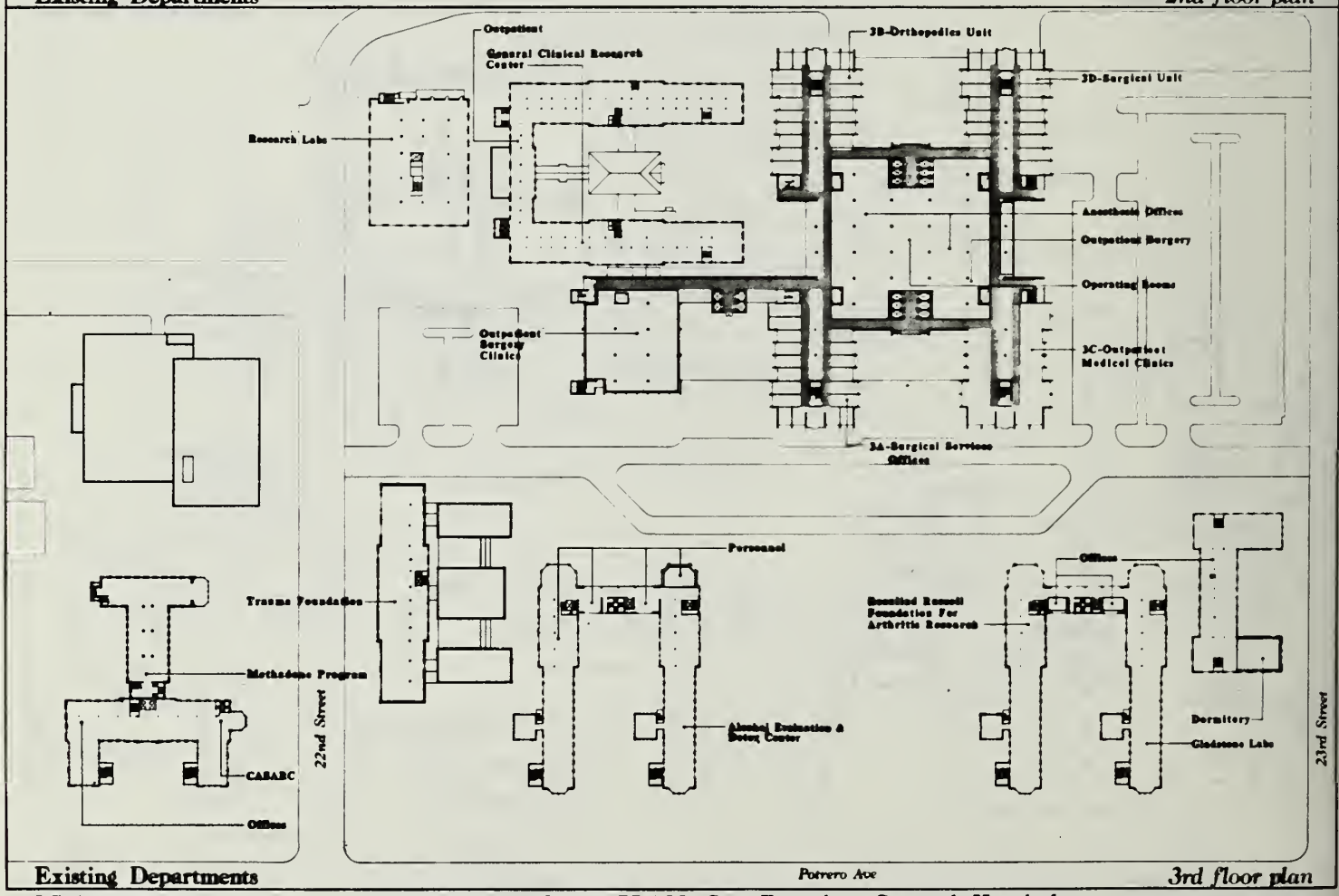
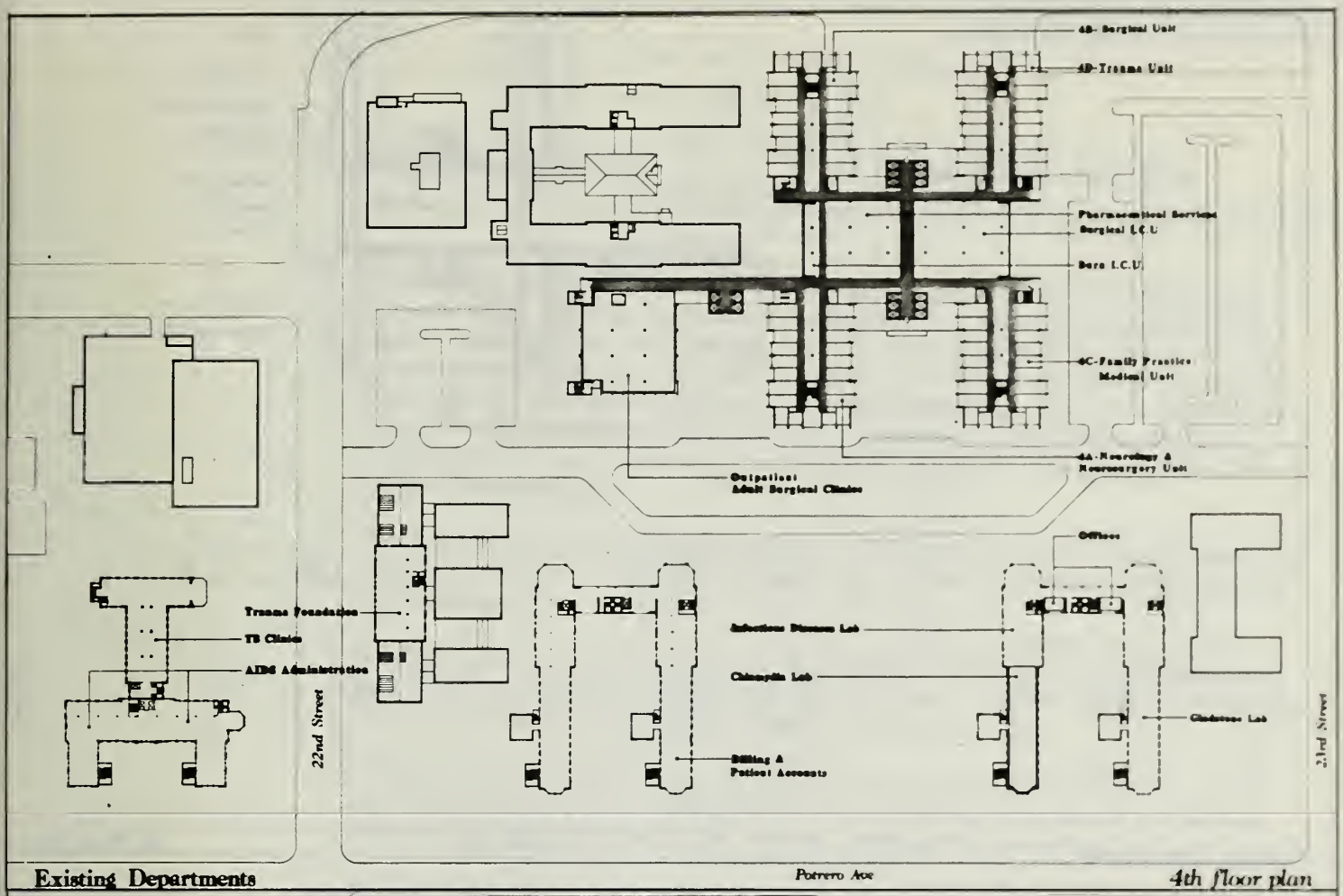
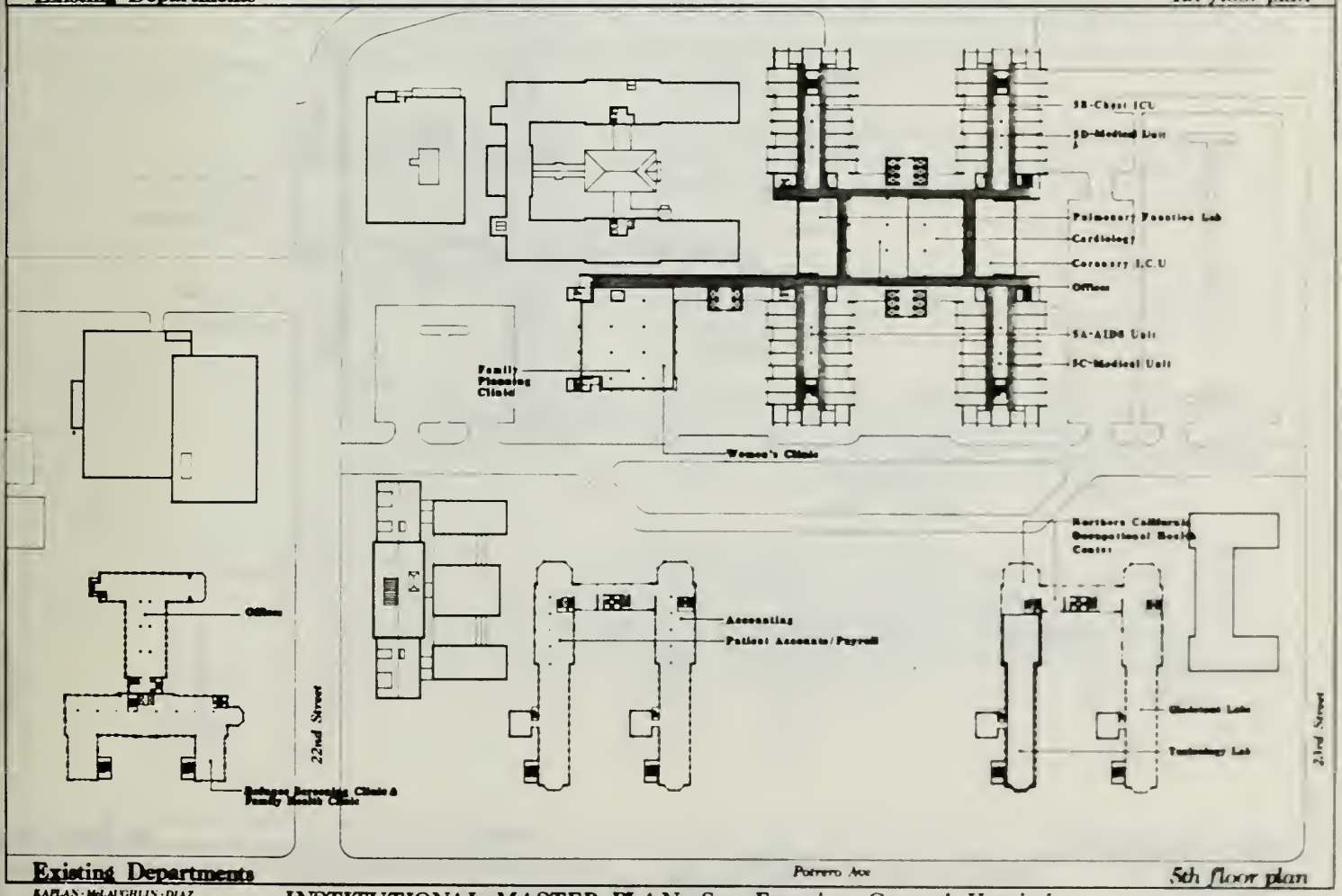
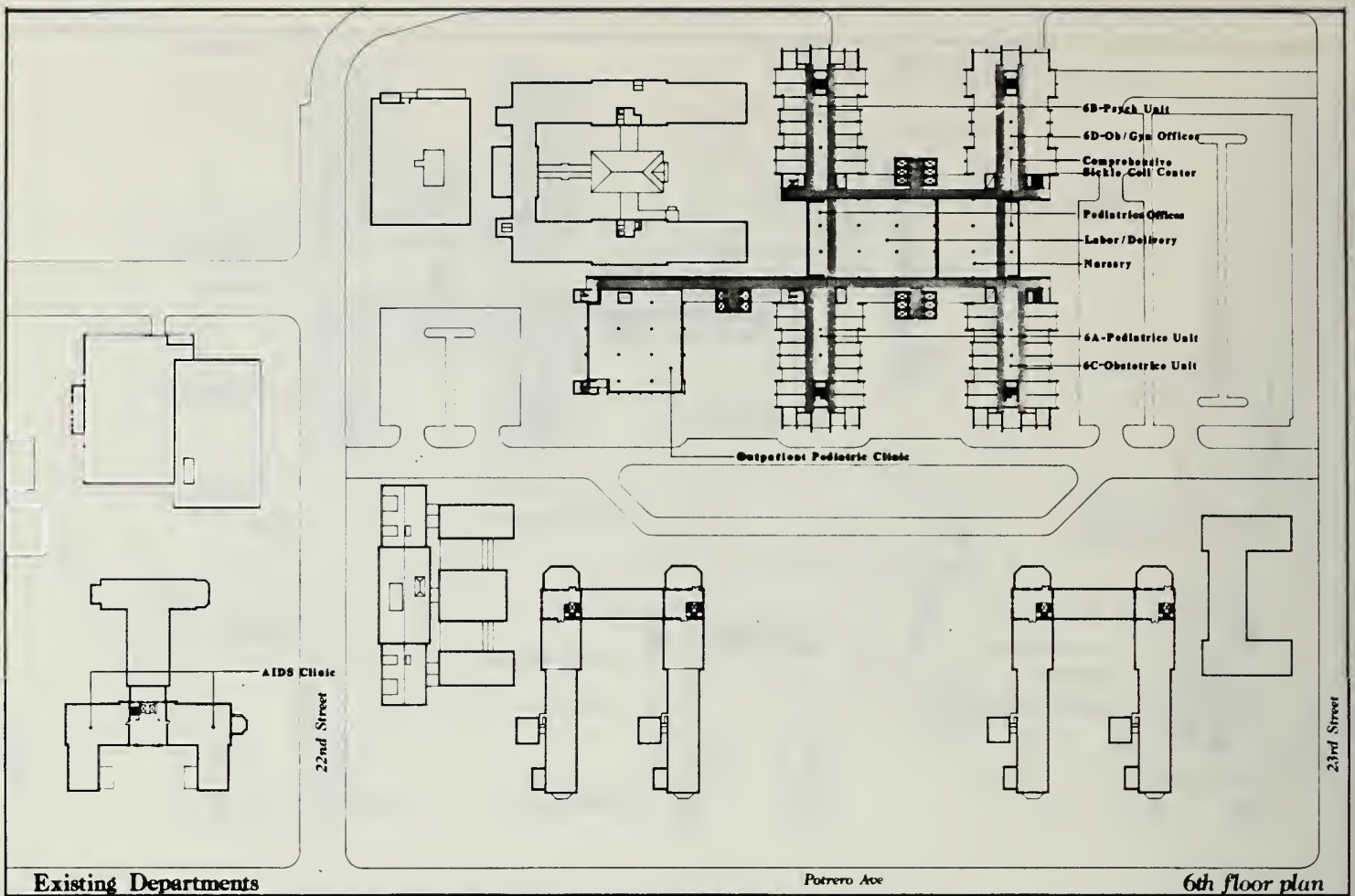

Morgue
Research Labs
Loading Dock
Kitchen
Cafeteria
Cafe Vending
Dining
Kitchen Lockers
Dining Room
Chapel
Administration
Medical Records
Clinical Labs
Trauma Foundation
Outpatient Clinics
Outpatient Administration
22nd Street
Biomed Engineering
Dental Clinic
Data Processing
Center For Municipal Occupational Safety & Health
Medical Library
Gladstone Labs
23rd Street
Existing Departments
Potrero Ave
2nd floor plan


Outpatient
General Clinical Research Center
Research Labs
3B-Orthopedics Unit
3D-Surgical Unit
Anesthesia Offices
Outpatient Surgery
Operating Rooms
3C-Outpatient Medical Clinics
Outpatient Surgery Clinics
3A-Surgical Services Offices
Trauma Foundation
Methadone Program
CASARC
Offices
22nd Street
Personnel
Alcohol Evaluation & Detox Center
Donated Russell Foundation For Arthritis Research
Offices
Dormitory
Gladstone Labs
23rd Street
Existing Departments
Potrero Ave
3rd floor plan

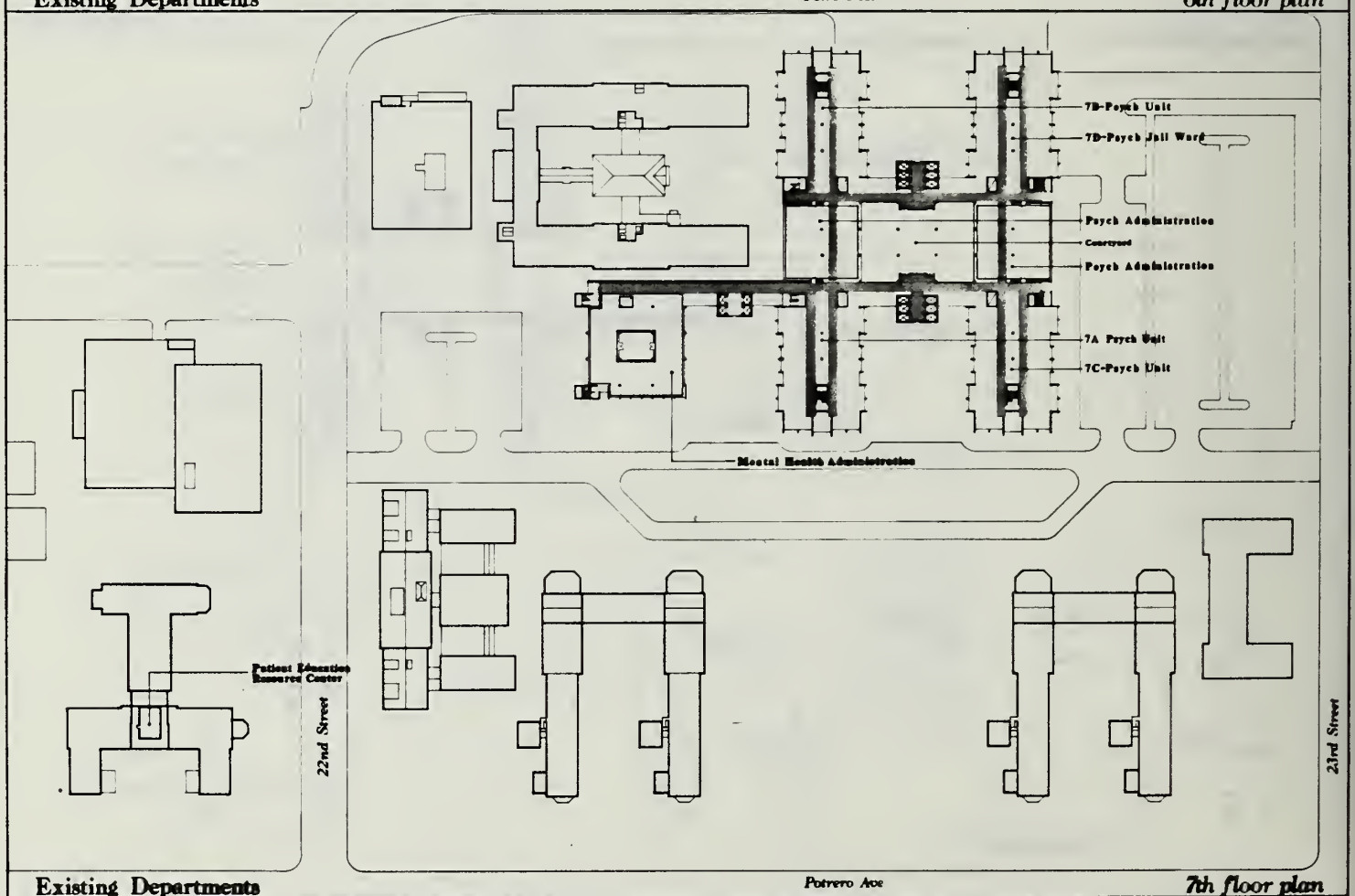

4B- Surgical Unit
4D-Trauma Unit
Pharmaceutical Services
Surgical I.C.U
Burn I.C.U
4C-Family Practice Medical Unit
4A-Neurology & Neurosurgery Unit
Outpatient Adult Surgical Clinics
Offices
Trauma Foundation
TB Clinic
AIDS Administration
Infectious Diseases Lab
Chlamydia Lab
Glaucoma Lab
Billing & Patient Accounts
22nd Street
21st Street
Existing Departments
Potrero Ave
4th floor plan


5B-Chest ICU
5D-Medical Unit
Pulmonary Function Lab
Cardiology
Coronary I.C.U
Offices
5A-AIDS Unit
5C-Medical Unit
Family Planning Clinic
Women's Clinic
Northern California Occupational Health Center
Accounting
Patient Accounts/Payroll
Offices
Glaucoma Lab
Toxicology Lab
Refugee Screening Clinic & Family Health Clinic
22nd Street
21st Street
Existing Departments
Potrero Ave
5th floor plan



Existing Departments

6th floor plan



Existing Departments

7th floor plan

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STRUCTURAL SYSTEMS

FACILITIES OVERVIEW

This structural report is an evaluation of Buildings 1, 9, 10, 20, 30, 40, 80, 90, 100 and the Service Building. Buildings A through E and Building 3 are not included since they are recently constructed projects. However, it should be noted that Buildings A to E, while in conformance to Hospital requirements for seismic restraint, were designed and constructed prior to the current Hospital's facility requirements outlined in the California Administration Code, Title 24. This is significant only because it minimizes the ability to expand these buildings vertically, an ability that had been originally programmed and incorporated into the design of these buildings.

The design and construction of many of the buildings at San Francisco General Hospital took place between the years of 1912 and 1931, with the exception of the Service Building, which was finished in 1971.

Buildings 10, 20, 30 and 40 were originally four stories; a fifth story was added several years later. Other modifications were also added on including a connection link between Buildings 10 and 20 and Buildings 30 and 40, and exterior fire stairs.

Building 1 is a three-story building with a four-story center core and building wings 1A, 1B and 1C that are two stories. Building 80 is a six-story building with a partial seventh floor. Exterior stairs were also added to this building. Building 90 is five stories.

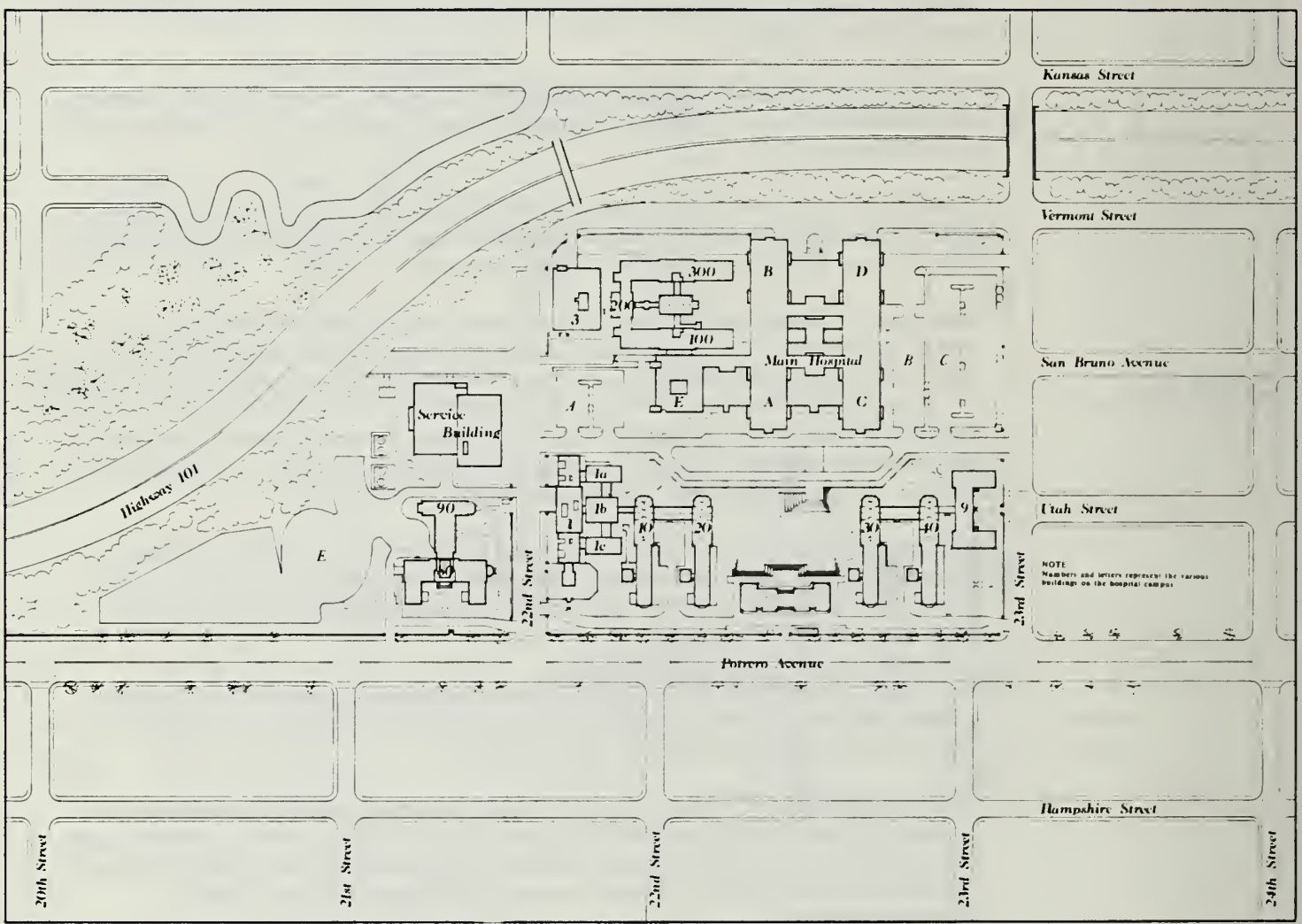
Building 100 is a three-story building with a one-story structure in the center core area. On the third floor of the west wing, there are twelve rooms housing patients undergoing clinical studies. Some of these patients are non-ambulatory.

The Service Building is a concrete structure and incorporates both ordinary reinforced concrete and post-tensioned members. This building houses the mechanical and electrical equipment that supplies power to the hospital and laundry facilities. A portion of this building is also used for parking.

The structural systems for the various buildings, excluding the Service Building, are, in essence, very similar; these are described below. The original building use, as defined by the floor layouts, is similar for all floors of each building.

The buildings have a full or partial basement and are interconnected by tunnels used for service and power distribution. The perimeter basement walls are poured-in-place concrete and, considering the era in which these buildings were constructed, these walls are probably not reinforced with steel bars. The use of reinforcing steel is typical in concrete construction today.

The exterior walls are unreinforced brick masonry. The floor framing consists of steel beams encased in concrete. These beams support a cast-in-place reinforced concrete floor. Floor beams are generally supported by steel columns which, at the foundation level, connect to spread reinforced concrete footings. The unreinforced brick masonry walls are most probably supported by continuous unreinforced concrete footings.



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STRUCTURAL SYSTEMS

FACILITIES OVERVIEW

The structural arrangements and connections in all the buildings appear to be typical of their time: i.e., the beams are supported by simple beam-column connections which are incapable of resisting or transferring any lateral moment across the joint. Again, the Service Building is the exception.

The flat-roofed buildings' structural system is a simple beam-column arrangement with no moment connections; the Service Building being the exception. The pitch-roofed buildings' systems are, generally, supported by steel trusses.

The Service Building is a modern structure which was constructed in accordance with the then current state-of-the-art. The lower roof in the north area of the building's parking lot, and the first floor, consists of a post-tensioned concrete slab which is supported by post-tensioned concrete girders evenly spaced and running a North-South direction. The high roof in the south area of this building consists of ordinary reinforced concrete ribbed slab supported by post-tensioned concrete girders, again, even spaced and running in a North-South direction. Loads from roofs and floors are transmitted to the footings by reinforced concrete columns and bearing walls. The foundation system consists of a combination of cast-in-place piers with continuous or isolated spread footings.

GRAVITY LOAD RESISTANCE

Inspection of the concrete basement and tunnel walls of all the buildings, excluding the Service Building, revealed some cracks. These cracks vary in width and are probably the result of differential settlement. The lack of reinforcement in the concrete walls and the brick walls above them undoubtedly contributed to this condition. It is our opinion that these cracks do not appear to be serious at this time; however, monitoring is recommended.

The exposed brick walls appear to be in fair condition; however, considering the age of these buildings, it is probable that isolated area of mortar deterioration can be found.

On Building 40, the clay tile roofing material at the southwest corner did not appear to be secured. Time and limited access did not permit a thorough inspection of the roof, but it is obvious that corrective measures are necessary.

The Service Building was also inspected and found to be in very good condition.

LATERAL LOAD RESISTANCE

Prior to the 1931 Long Beach earthquake, structural designers gave no consideration to the potential damaging effects of earthquakes or heavy winds because the profession did not have the technical knowledge to undertake such studies. Since then, research and observations of actual structures after earthquakes have contributed to the development of the modern-day building code.

Based on our inspection and a review of the drawings available, the major finding, as expected, was that all these buildings have inadequate seismic lateral load resisting systems; the exception to this finding is the Service Building. As was noted earlier in this report, the use of simple supports was typical in the beam-column connection. This type of structural connection cannot provide lateral load resistance.

STRUCTURAL SYSTEMS

FACILITIES OVERVIEW

It is the intent of modern building codes, including that of the City and County of San Francisco, that a complete, continuous and adequate stress path be provided to transfer the lateral loads safely into the ground. This stress path must include adequate connections between structural elements. In their present state, these buildings, excluding the Service Building, do not meet the minimum requirements of the current code. The main reasons for this are as follows:

1. Although the floor diaphragms may be adequate, we believe they lack the chord members or connections to transfer the shear from the diaphragms.

2. The walls are unreinforced masonry. This type of construction has not fared well and has resulted in major damage in a moderate to major earthquake. Collapse of the wall is, indeed, possible.

3. The parapet walls are not designed for seismic loads.

Exterior staircases have been added onto Buildings 10, 20, 30, 40 and 80. The structural details for this construction need careful study to evaluate the structural integrity of the staircase acting under lateral loads. If it is freestanding, proper separations from the building must be assured to prevent "pounding and impact" during an earthquake. If not freestanding, the effect of this lateral load will be transferred into the original building which, as noted in Item 2 above, is inadequate to carry its own loads.

The Service Building is a "Box System" in which all lateral loads from roof diaphragms are transmitted to the foundation system by means of concrete shear walls. The foundation system dissipates these forces into the ground.

BUILDING UPGRADE

The San Francisco Building Code provides minimum standards to safeguard life and limb, health, property, and public welfare by regulating and controlling the design, construction, alteration, repairing, maintenance, use, etc., of buildings erected or to be erected in San Francisco. Provisions of this code shall supplement all laws of the State and the City and County of San Francisco relating to buildings and property.

Consequently, any building alteration must comply with all prevailing codes. Once the building change has been defined, a complete engineering study together with consultation with Building Officials must be undertaken. Until we have established what changes are to be made, we can only present a general discussion of the San Francisco code as it applies to these buildings:

1. Substantial Change

   If alteration work involving substantial changes to elements such as walls,partitions, ceilings and mechanical and electrical systems on over two-thirds of the floors of these buildings (excluding basements) is desired, then each building as a whole must comply with the Lateral Force Design Requirements for Existing Buildings, Code Section 2313.

2. Structural Work

The extent of the engineering studies required to upgrade an existing building shall be determined using the following criteria:

a. When structural alteration work is to be done on a floor(s) of a building, the structural components both above and below the floor(s) involved shall be improved as required to maintain structural integrity.

b. When the floor loading is increased, the floor(s) involved shall meet the structural requirements of this code and all structural components below the floor(s) shall be strengthened to support the additional loads.

c. When more than 30% (cumulative from the time of construction) of the floor and roof areas of the building or structure have been or will be involved in substantial structural alteration work, the building or structure shall comply with Lateral Force Requirements for Existing Buildings, Code Section 2313.

3. Horizonal Additions

When the cumulative area of additions above grade exceeds 30% of the area of the original building, and the additions are structurally interconnected to or inadequately separated from the original building, the entire structure shall comply with the Lateral Force Requirements for Existing Buildings, Code Section 2313.

The building may be used for more restrictive occupancy classification as determined from Chapter 5 of the San Francisco Building Code only when the structure as a whole meets the requirements in this code for such occupancy.

4. Vertical Additions

The building shall comply with the Lateral Force Requirements for Existing Buildings, Code Section 2313.

The building shall be used for the same occupancy classification as originally built, or for less restrictive occupancy classifications, as determined from Chapter 5 of the San Francisco Building Code.

5. Change of Occupancy

When changes in a building result in a higher occupant load or live load than the existing legal use or the use for which the building was originally designed, the building shall meet the Lateral Force Requirements for Existing Buildings, Code Section 2313. Some exceptions, as defined in Chapter 5 of the San Francisco Building Code, may apply.

STRUCTURAL SYSTEMS

FACILITIES OVERVIEW

COMPLIANCE WITH CODE SECTION 2313

Lateral load resisting elements such as reinforced masonry or concrete shear walls and/or a system of steel braced members shall be installed. A properly designed new foundation must be installed to transmit all loads from these systems to the ground. Our preliminary information on these buildings indicates that a large portion of the lateral load acting on these buildings will have to be resisted by the new systems.

An anchorage system to tie the existing unreinforced brick masonry walls to the roof and floor diaphragms shall be installed.

All roof and floor diaphragms may have to be reinforced. A new collector, chord and anchorage system must be installed to transmit the forces from these diaphragms to the new shear wall steel frames.

All unreinforced masonry parapets, cornices, ornaments, appendages, etc., must be properly braced in accordance with the code.

Physical testing of the existing building materials may be required.

It may not be economically feasible to meet the above requirements for unreinforced masonry structures. In some cases, the cost may only be justified on the basis of aesthetic or historical value.

CONCLUSION

It is our professional opinion that these buildings are in fair to good condition and are capable of sustaining the gravity loads for which they were designed.

With respect to lateral loads, we conclude that these buildings, with the exception of the Service Building, do not possess the structural systems necessary to resist seismic loads as prescribed by the current building code for the City and County of San Francisco.

History has shown us here in California, as well as in other seismic areas around the world, that unreinforced masonry structures are among the most vulnerable during moderate to strong seismic movements.

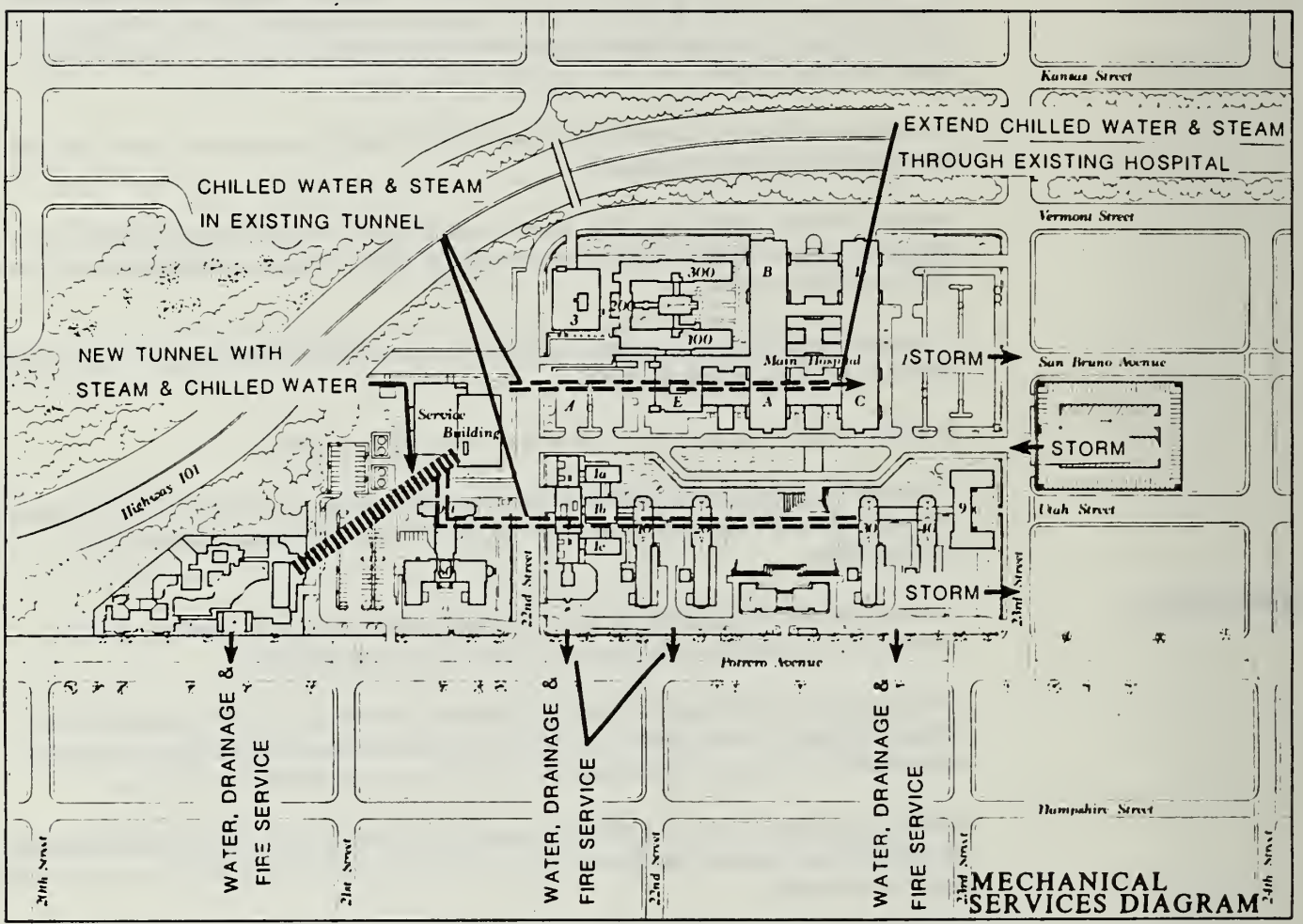
On the basis that no major changes have been made in the code since the Service Building was constructed, we concluded that this building is adequate to resist all vertical and lateral loads.

LIMITATIONS

The structural survey and findings in this report were based upon generally accepted standards of the structural engineering professional and are limited to the cause and effect of vertical or gravity loading. Furthermore, it should be emphasized that only visual inspection techniques were used and no sample materials were taken for testing, nor was any wall or floor covering removed to inspect concealed construction. Therefore, no warranty or guarantee is implied or expressed that other problems may not exist at this time or develop in the future.

MECHANICAL SYSTEMS

FACILITIES OVERVIEW



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MECHANICAL SYSTEMS

FACILITIES OVERVIEW

DESCRIPTION/CAPACITY/CONDITION

SANITARY & STORM

The on-site and adjacent City water systems located in the streets are adequate for present and future loading. No extraordinary loading or blockage problems have occurred except kitchen drainage and associated areas which are now being upgraded. The diagram on the opposite page describes the locations of these systems.

New hospital building interior drainage systems are apparently in good condition. Older building systems have seepage and the original piping is at the end of its economic life. Any renovation in these buildings should include complete replacement of waste, vent and storm systems.

WATER SYSTEMS

Domestic water and fire service is also adequate with on-site mains and additional service available from adjacent City mains. City mains connect to three reservoirs with excellent isolation capabilities. Capacities are sufficient for present and future loads.

Interior domestic water systems are in good condition in the main hospital and the newer facilities. The older facilities have not experienced excessive leaks but are at the end of their economic life. Any renovation should consider replacement of the water system. Tests have not indicated any purity problems such as Legionnaire's disease. The Hospital has no emergency standby water supply on site.

SITE STEAM

All buildings are served with steam from a central plant distributed through the tunnel system. No excessive leaks have been experienced but old condensate systems should be monitored and replacement anticipated within 15 years. Pipe sizing is adequate for future use except for future research zones. Any major additions near Buildings 10/20 or 30/40, would require all new steam piping for existing and new additions. Any new outpatient care can easily be served by a short extension through the basement of the main hospital. A new tunnel from the central plant will be required for the proposed Mental Health Center.

PNEUMATIC TRANSPORT

A ducted trash and linen transport system extends in the tunnel to the main hospital. Currently, it is only used for linen transport. It requires extensive maintenance. Any plan to eliminate the laundry should consider the maintenance and energy savings obtained by abandoning this system or converting to trash transport.

CHILLED WATER

Chilled water is distributed from the central plant in the tunnel system. New pipes will be required for the Mental Health Facility or any other new facilities. The existing tunnel system to the research facilities may have space limitations. New areas served from the main hospital tunnel can use existing pipes by increasing velocities or lowering distribution temperature.

CENTRAL PLANT

The central plant is well maintained, a late 1960's vintage. Various systems have been upgraded for energy and preventive maintenance reasons. A continued program of major overhaul for valves, pumps, etc., is absolutely required due to age of these components.

The plant consists of central steam boilers and central absorption chillers. The present boilers have excess capacity which can serve additional future needs while maintaining required standby capacity for the hospital. The boilers are dual fueled for emergency use and are maintained in excellent condition. Boiler controls and energy controls have recently been upgraded.

MECHANICAL SYSTEMS

FACILITIES OVERVIEW

DESCRIPTION/CAPACITY/CONDITION

CENTRAL PLANT

Waste steam from the existing turbine generator is available for other uses.

Central chillers are currently being retubed and refitted so expected life should be an additional 15 years. Current loads are 60% to 70% of total capacity of both chillers. This results in inadequate capacity if one chiller is out of order. The cooling tower has significant excess capacity.

The laundry facility equipment requires excessive maintenance and is at the end of its economic life. Any consideration to abandon the laundry should coincide with a building program to provide space for new chillers or ice storage.

ENERGY

OTHER STUDIES

All the mechanical systems have been reviewed for energy usage by other engineers in the past. Currently, certain retrofits are underway in the main hospital. That study should be updated periodically and integrated into the Master Plan. Reuse of waste turbine steam needs to be enacted or reevaluated immediately.

MASTERPLAN CONSIDERATIONS

Additional chiller capacity should be a result of thorough economic analysis and comparison of ice storage, steam absorption, or low temperature electric. Future additional loads could at that time evaluate the economy of additional absorption utilizing waste steam or low temperature electric with ice storage in lieu of additional chilling capacity. Lower temperature distribution results in lower prime mover costs and increases the capacity of existing pipes.

Consideration should also be given to trash incineration and additional cogeneration as part of any general central plant remodel. All new hot water generation should utilize turbine exhaust.

MECHANICAL SYSTEMS

FACILITIES OVERVIEW

SYSTEMS AND RECOMMENDATIONS

CENTRAL PLANT

Any significant addition including the AIDS Laboratory and the Skilled Nursing Mental Health Center should include additional chiller capacity. (See energy paragraph on previous page.) If the laundry is to be vacated, consideration should be given to timing this with the additional chiller requirements.

New chillers will require an addition to, or renovation of the central plant. At the time of this central plant addition, reclaim and incineration should be considered. Additional capacity for other new buildings could be accommodated by ice storage or additional chillers, pending economic evaluation at that time.

MENTAL HEALTH CENTER

Systems for the proposed Mental Health Skilled Nursing Center were described in detail in the Mental Health Center Program Report.

A new tunnel extension is required from the Service Building to the new facility for steam and chilled water.

AIDS LABORATORY

The AIDS Laboratory extension is currently under design and has no significant affect on Masterplan of mechanical systems.

FUTURE OUTPATIENT CARE AREAS

Underground and tunnel utilities are adequate for these areas. New chilled water and steam pipes must be extended through the basement for a short distance.

FUTURE PARKING GARAGE

The proposed parking area will only increase storm drainage, the existing systems are adequate for this increased load.

FUTURE RESEARCH AREAS

These areas will require new steam, condensate and chilled water service in the existing tunnels. If the existing buildings' operable windows are eliminated by new construction, mechanical ventilation will be required.

EMERGENCY WATER SUPPLY

Because SFGH is San Francisco's trauma center, it is recommended that an emergency water supply tank be provided on campus. A 100,000 gallon tank would provide a 3-day supply of water. In an emergency this would allow time for the Fire Department to install temporary water lines to an available reservoir.

ADDITIONAL RECOMMENDATIONS

All the main underground sanitary and storm drains should be inspected from the interior with a televised inspection device and evaluated for projected capital improvement requirements.

All older buildings contain systems which are either out of date, inefficient, or at the end of their useful life. Renovation in the older buildings such as 1, 9, 10/20, 30/40, 80/90 or 100 should include complete replacement of their mechanical systems. If no renovation is contemplated, consideration should be given to replacement of the plumbing systems within 10 years.

ELECTRICAL SYSTEMS — *FACILITIES OVERVIEW*

The existing electrical service at San Francisco General Medical Center enters the Service Building with a single service rated for 400 amps at 12KV from a PG&E pole on the site. The main service switches are 1200 amp frame size with a 400 amp trip setting operating in parallel: these then separate the rest of the electrical system into commercial feeder #1 and commercial feeder #2 although there is only one existing feeder entering the site from PG&E. From the main service switches, the system feeds to two groups of 12KV selector switches. One group is located in a vault at the utility services building, the second group is in a vault adjacent to the main switchgear room in the sub-basement of the new hospital building.

The selector switches provide the opportunity to transfer load from incoming commercial feeder #1 to incoming commercial feeder #2 or to the emergency generators. They also provide an opportunity to access the system at 12KV. There are four locations available to access 12KV power: 1SSC1, 1SSC2, 2SSC1, and 2SSC2. The 1SS selector switches are in manhole #1 outside the existing Service building. The 2SS selector switches are in the new hospital building.

At both of these locations, 1SSG3, and 2SSG3 provide the additional possibility of selecting at that point emergency power to serve either the service building or the main hospital building.

The existing PG&E feeder is designed for 400 amps at 12KV. The existing demand is 4200KW or 240 amps. The system as it exists, by accessing the 12KV can handle additional load of 2400KW. Beyond that, the existing system can be doubled in size by splitting feeders 1 and 2 completely at the main service switches and bringing a completely separate service primary feed from PG&E. The existing switch board was designed to accept two PG&E feeders. Beyond that, an empty switchboard section is provided between the two main service switches so that a tie-breaker can be installed. This will allow the loads to be switched between two separate incoming PG&E feeders, once the second feeder is installed.

Commercial feeder #1 now serves the main hospital building and Building #40. Commercial feeder #2 serves the utility building distribution switchboard and, from there, the remainder of the site. The selection between commercial feeders 1 and 2 is done at the load break switches in front of the distribution transformers.

The one-line diagram describes the system and the switches are drawn as they are currently set.

The system is designed to provide plenty of flexibility to accommodate a failure anywhere in the system. All four distribution boards are transfer switchboards allowing each breaker to be tied to either normal or emergency power through a variety of settings. There are six possible settings available for each output breaker in the four distribution boards. The switches and their functions are described below:

A. Trips feeder.

B. Connects to commercial bus.

C. Feeder on commercial bus transfers automatically to generator bus. Returns to commercial bus when it is re-energized.

D. Feeder on generator bus transfers automatically to commercial bus when generator bus fails. Returns to generator bus when it is re-energized.

E. Closes feeder to generator bus.

F. Trips feeder.

Current operations keep all breakers on setting 'B' for normal power or setting 'C' for automatic transfer to emergency power.

The generators are each 2000KW at 12KV, 30 providing plenty of emergency power capacity to handle critical loads in the facility for the present and future needs of the facility. One generator is kept on line at all times in order to meet the code requirement of 10 seconds transfer time to emergency power during a normal power failure. All of the existing distribution boards are transfer switchboards so that each output breaker can be set on either the normal or the emergency bus.

The 480 volt distribution system is, however, limited as there are very few spare breakers available in any of the existing switchboards. The following lists the existing loads on existing breakers.

			UTILITY BUILDING
A. Switchboard 1			
	B1	Building 1 Power and Lighting	400 AMP
	B2	Building 10 Power and Lighting	400 AMP
	B3	Building 80 and 90 Power	400 AMP
	B4	Building 80 and 90 Lighting	400 AMP
Emer.	B5	Service Building Motor Control Center MCC-E	400 AMP
	B6	Building 30 and 9	400 AMP
	B7	Spare	400 AMP
Emer.	B8	Panel EB4	400 AMP
Emer.	B9	Building 10	400 AMP
	B10	Spare	400 AMP
Emer.	B11	Panel E1H	400 AMP
	B12	Spare	1000 AMP
	B13	Service Building Panel D1HA	600 AMP
	B14	Service Building Motor Control Center MCCA	600 AMP

ELECTRICAL SYSTEMS *FACILITIES OVERVIEW*

A. Switchboard 1 (Cont'd)			UTILITY BUILDING
	B15	Service Building Motor Control Center MCCB	600 AMP
	B16	Service Building Motor Control Center MCCC	800 AMP
	B17	Service Building Motor Control Center MCCD	800 AMP
B. Switchboard 2			MAIN HOSPITAL BUILDING
	1	General Lighting	800 AMP
Emer.	2	Lighting	800 AMP
	3	Transformers	800 AMP
	4	Transformers	800 AMP
	5	Elevators	800 AMP
	6	Building 100 and 3	800 AMP
C. Switchboard 3			
	1	Motor Control Centers MCCMH and MCCMK	1000 AMP
	2	Motor Control Center MCCM	1000 AMP
Emer.	3	Motor Control Center MCCME	1000 AMP
	4	Motor Control Center MCCMJ	1000 AMP
	5	Motor Control Center MCCMG	1000 AMP
	6	Spare	1000 AMP

ELECTRICAL SYSTEMS

FACILITIES OVERVIEW

			MAIN HOSPITAL BUILDING
D. Switchboard 4:			
	1	Lighting	800 AMP
	2	Transformer	800 AMP
Emer.	3.	Panel EP1 and EP2	800 AMP
Emer.	4	Lighting	800 AMP
	5	Power	800 AMP
Emer.	6	Light, and Power, Elevator, Sump Parking Lots Lights	800 AMP

Feeder conduits leaving the service building travel through the tunnel system to feed Buildings 80, 90, 1, 10, 20, 30 and 9. A main switch, transformer, and 208 volt distribution equipment are located in the tunnel for each service. Some of the feeders are labelled with the switch number from the service building switchboard. Most of the distribution equipment for these buildings is fairly old and appears to be filled to capacity.

Building 40 is fed from selector switch 2SSC2 in the main hospital building and has plenty of spare capacity as well as new distribution equipment.

Building 100 and 3 are fed together from the main hospital 480 volt distribution equipment with an 800 amp service.

An uninterruptible power supply (UPS) system has been provided in the main hospital building. This system feeds the pneumatic tube system, the MCC Powers control system for HVAC equipment, the D.A.S. (Data Acquisition System) panels and the fire doors and smoke detectors.

FUTURE GROWTH

Future growth in the facility can be handled with the addition of a third 480 volt distribution center fed from the existing selector switches. In order for the system to accommodate the additional load, a second PG&E service should be installed along with the tie-breaker in the main switchboard. This will double the capacity of the existing system as well as provide a completely separate source of PG&E power to the facility. With a planned load-shedding system and the tie-breaker installation, these two services can be used as back-ups for one another in addition to the emergency generator system.

The projected additions to the facility: mental health facility, ambulatory care facility, parking structure, AIDS research clinic and inevitable remodelling will create enough additional electrical demand (approximately 6800KW) to warrant additional electrical service from PG&E. As long as the electrical demand warrants the increased service, PG&E cannot impose the special facilities charges that would be imposed if the second service were to be used only as a backup service.

FUTURE GROWTH
(Cont'd)

This new 480 volt distribution center could be located near, or in, the existing service building so that the existing tunnel system could be utilized to route new feeders. This service switchboard could then feed the new Mental Health Facility and any other new structures that might occur on the campus.

As remodelling projects occur to the existing buildings on the campus, the electrical service to that building will have to be individually assessed as to its ability to handle the additional loads. It appears that any remodeling of substantial size to any of the buildings will require additional service. It may be possible to handle immediate additional load requirements by utilizing one of the few remaining spare breakers in the system with the intent that future additional loads will be fed from the new 480 volt distribution system discussed above.

The addition of the two output breakers in the generator distribution equipment will also provide for increased flexibility in the system. The equipment was designed and built to have these two switches added. They are shown on the one line diagram.

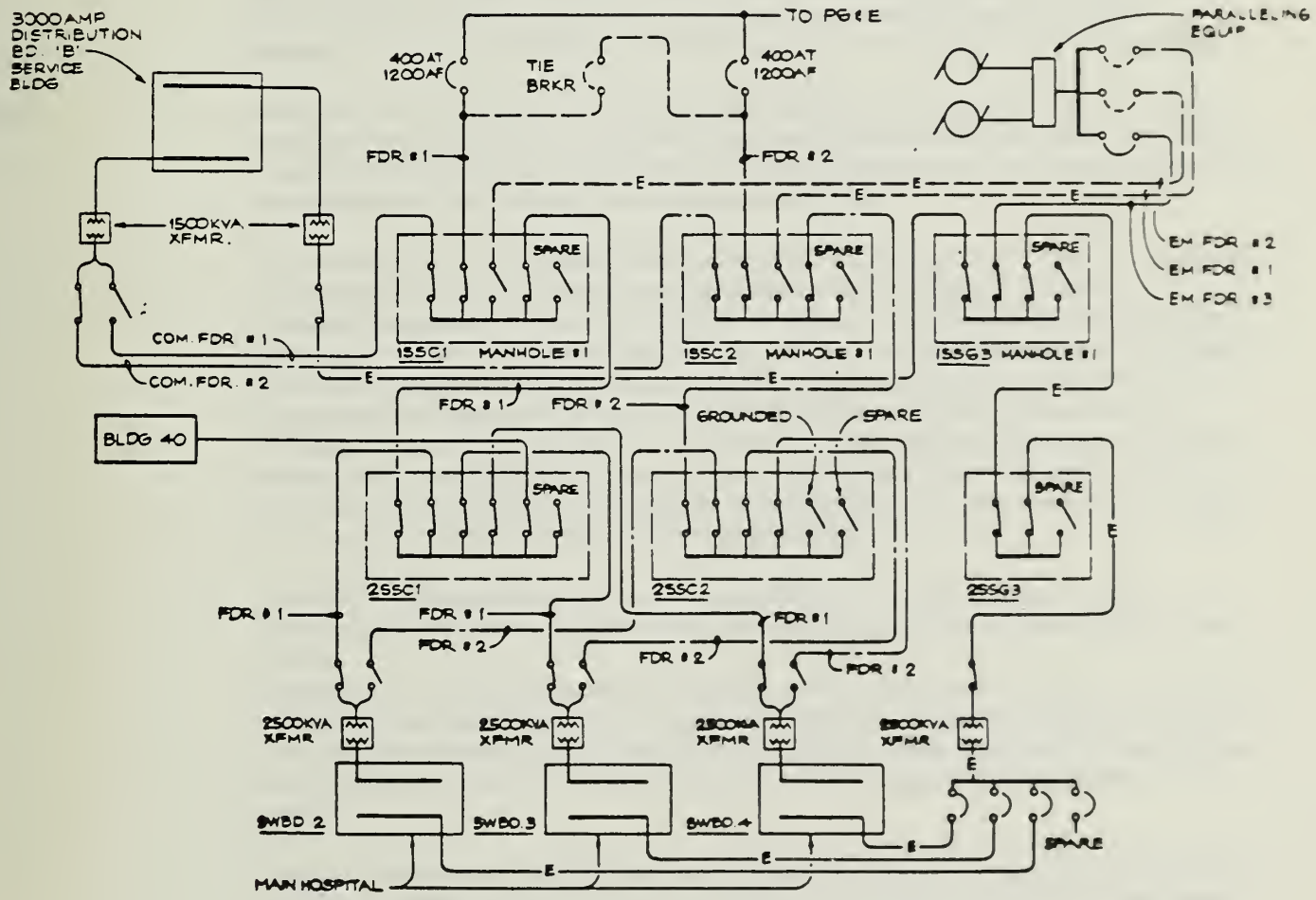
One of the output switches in 2SSC2 is inoperative. It is grounded somewhere in the system. This should be corrected and kept available to access the 12KV system at some future time.

The controls for the electrical system were designed and installed in the 1960's and early 1970's and were state-of-the-art at that time. However, most of the recent electrical system problems have been due to its control system's relay failures. An upgrade of this system to current solid state controls is possible and could eliminate such failures. Some of the existing system's logic that is not currently utilized could be eliminated at the same time and thus simplify the system as a whole.

EXISTING ELECTRICAL SYSTEMS

FACILITIES OVERVIEW

Existing Electrical System One-Line Diagram.



FIRE PROTECTION SYSTEMS

FACILITIES OVERVIEW

FIRE ALARM SYSTEM

The hospital-wide alarm system is an Autocall Howe positive noninterfering succession system with the capability of operating despite the worst single break or ground fault on any of the transmitting conductors. It is of the coded type. Initiating devices are connected both through control units to transmitters and directly to transmitters. Transmitters are electrically pulsed from controlled equipment located in the powerhouse. When an initiating device operates, it sends a code through its transmitter to the boiler house. Equipment there automatically relays a common alarm signal to the fire department. Fire alarm headquarters is advised by telephone as to the exact location of the transmitter. The age of this equipment was not determined, but it is nearing the end of its useful life. None of the transmitting equipment is in standard production, and the factory does not maintain an inventory of spare parts. Each time a spare part is needed or a new transmitter is added, it must be specially made for the job. As a result, there are long time delays and the equipment is very expensive. The circuits do not have sufficient capacity to accommodate any new buildings.

TUNNELS

There are two sets of tunnels connecting all the buildings on the hospital campus. Some of these are obviously service tunnels and outside the hospital-patient area. Others are used to transport materials and are used by the staff. The fire department has expressed concern that these tunnels present an undue risk to persons using them.

The tunnels have concrete walls, floors, and ceilings, and are approximately 14 feet wide and 15 feet high. There is a mineral tile ceiling at just below the 8-ft level. There are sprinklers on standard spacings below the T-bar ceiling. One sprinkler was noted missing in the tunnel in between Building 10 and Building 100, just west of the intersection of the tunnel going to the power-house. The space above the ceiling contains pipes and electrical conduits. The tunnel in question runs for about 150 feet north and south, along the west wall of Building 100. At about the center line of the power house, this tunnel connects with a north-south tunnel, which runs into the service center. Just outside the service center, a tunnel runs west to the center line of Building 90. It turns north to about the south end of Building 80, then runs west to the southwest corner of Building 80.

One of the fire department's concerns is storage in these tunnels. Although they are not corridors in a true sense, they have most of the attributes of corridors and should be treated as such.
Storage is not permitted in corridors. We understand that there was a time when there was a considerable amount of storage in the tunnels. On the day of our visit, July 30, there was no storage in these tunnels, with the exception of some metal cabinets on wheels. They appeared to be temporary in nature. As with any other corridor, storage should be prohibited in the tunnels.

Another concern is the travel distance to exits from the tunnels. Paragraph 13-2.6.2 of NFPA 101, the Life Safety Code, permits a travel distance in a corridor of 150 feet in a sprinklered building. Section 3302(d) of the Uniform Building Code (UCB) permits a maximum travel distance of 200 feet in a sprinklered building. It goes on to state that the distance may be increased by 100 feet when the last 150 feet is within a corridor complying with standard corridor requirements. Although this corridor comes close to meeting all of those requirements, it does connect with other tunnels, as at the east end of Building 10. These tunnels are exposed by non-corridor spaces.

FIRE PROTECTION SYSTEMS — *FACILITIES OVERVIEW*

TUNNELS (Cont'd)

The requirements for smoke compartmentation were also examined. It would not be required under Section 1002 of UBC, which does not apply unless there are more than five nonambulatory patients on a story. NFPA 101 requires smoke barriers only on stories used for sleeping rooms. There are no patient sleeping rooms on this level.

Another consideration is the use of the corridors to transport materials, including some classified as hazardous. Although this happens in almost any corridor, the quantities involved are likely to be higher in the tunnels.

A north-south tunnel extends from under Wing B of Building 1, south through Building 9, and to the west side of Building 9. There are extensions of the tunnel into the basements of Buildings 10, 20, 30, and 40. They are common to storage and equipment areas. Unlike the other tunnels, these are not used for transporting patients and, in general, are not used by the public or staff. A problem exists where there are locked exits at the east end of the tunnel serving Building 40 and the one serving Building 9. This constitutes 120-foot and 60-foot dead-ends, respectively. There is a locked door at the west end of each of the tunnels.

One element of the master plan includes a new building (Skilled Nursing Mental Health Center) at the north end of the hospital property. The tunnel between the power house and Building 90 will be extended to connect this new building.

RECOMMENDATIONS

Tunnel Storage: The new tunnel should be designed so that it does not lend itself to storage. It should be wide enough for necessary vehicular and pedestrian traffic, but no wider.

The existing tunnels should be subdivided, preferably by two-hour construction and horizontal exits. There should, at least, be a horizontal exit in the east-west corridor at the south end of the tunnel from the power house and somewhere around the east end of the tunnel between Building 10 and Building 100. The door openings and doors should be constructed so that they are protected from damage by the equipment. They should be held open by smoke-detector-operated releasing devices. This might seem to violate the rule that no more than half the exits can be horizontal exits. However, the distance to the second exit is not limited, and there are traditional exits beyond the new horizontal exits.

The dead-ends in Buildings 9 and 40 should be eliminated. The exit doors are locked as a security measure. A system can be devised whereby the doors can be opened from the tunnel side. This could sound an alarm at the point of entry and any desired remote point.

Storage in both the existing tunnels and the new tunnel should be prohibited.

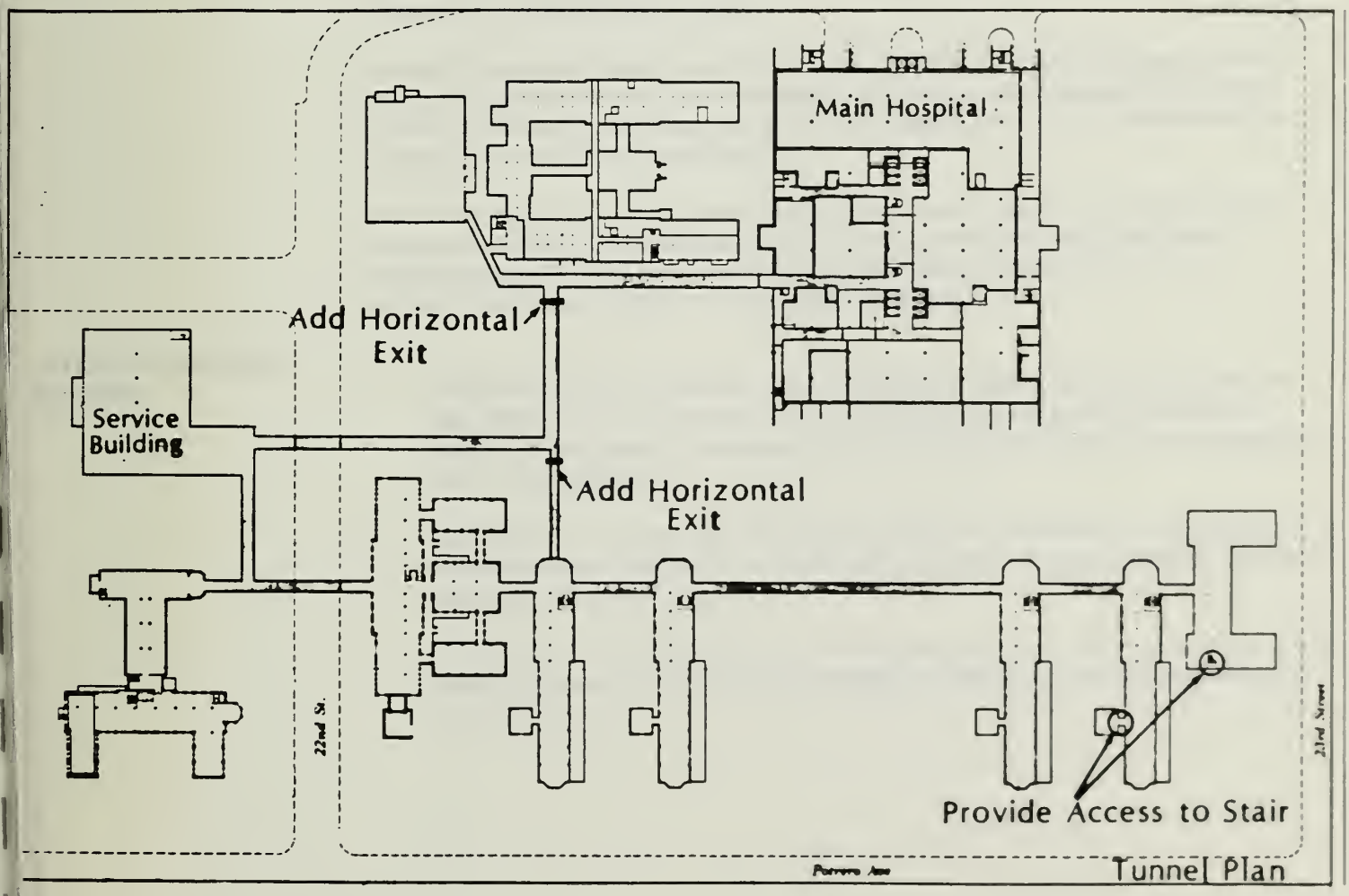
Use of the corridor for transporting hazardous materials is under the jurisdiction of the San Francisco Fire Code. An acceptable arrangement should be worked out with the fire department. An important consideration is that, even as they are, the tunnels are probably the safest way to transport patients, even under the present conditions. If alternative means of transporting hazardous materials are explored, consideration must be given to the dangers involved in the alternative methods.

FIRE PROTECTION SYSTEMS *FACILITIES OVERVIEW*

RECOMMENDATIONS
(Cont'd)

Fire Alarm System: A new proprietary fire alarm system should be established for the hospital. It should be connected to the fire alarm system in the new building. Insofar as possible, it should stand alone with respect to the existing Autocall Howe system, but should be able to accept output signals from the Autocall Howe system. The Master Fire Alarm Box should be tripped by both the Autocall Howe system and the new system. Specifications for the new proprietary system should include the ability to take over any of the functions from any part of the building presently served by the Autocall Howe system. It is anticipated that the Autocall Howe system would be removed in stages as areas are remodeled and as equipment deteriorates. Removed equipment can be saved and used for spare parts.

This diagram indicates locations for recommended horizontal exits and stair access in the tunnels.



FOOD SERVICE *FACILITIES OVERVIEW*

RECOMMENDATIONS

KITCHEN REMODEL

The existing dietary facilities at San Francisco General Hospital were designed to serve 1,100 beds, three times per day, as well as staff and visitors. Dietary currently prepares food for 485 beds, less than half of the intended design load. The short range development plan will increase the patient load by 185 beds for the new mental health center, increasing food production to a maximum of 650 beds, three times per day, as well as staff and visitors.

The kitchen occupies approximately 19,000 square feet as planned, with two (2) tray make-up lines, two dish rooms (one patient service and one cafeteria dining room service) a full service production bakery, as well as refrigeration, preparation and production cooking, adequate to support this large facility.

The original program used a china service with heated pellets to keep plates warm. China service has been abandoned for both patient trays and staff cafeteria and replaced with disposable ware with permanent trays. The patient trays are insulated, stacking, compartmentalized plastic trays which do not require a heat source to maintain proper food temperatures for at least thirty minutes.

The dietary department cannot operate at an acceptable rate of productivity because of its layout. Oversized work areas are under utilized and, in some cases, completely abandoned. The department is difficult to supervise from remote administrative offices and needs to be reconfigured to meet development goals.

This kitchen will be required to provide food for three meals a day to a new 185-bed mental health center. Meals will be produced in this kitchen, blast-chilled (not frozen), and transported to the 185-bed health center for rethermalization in a satellite kitchen, and serviced to patients and staff from two cafeteria serving lines.

KITCHEN OVERVIEW BY AREA

1. Production Bakery: This Bakery has been abandoned and is currently being used for disposable service ware storage. Its intended design capacity makes it inefficient to operate instead, goods are purchased from outside vendors (of equal or better quality) at a more reasonable cost.

2. Diet Kitchen: A separate diet kitchen with cooking and individual tray prep has been determined unnecessary and therefore has been abandoned. It is currently being used as dry goods food storage area.

3. Dietary Offices: The dietary offices are inadequate both in size and location. The offices need to be centrally located and large enough to facilitate inter and intradepartmental communications.

FOOD SERVICE *FACILITIES OVERVIEW*

4. Cook's Preparation and Production Cooking: Production cooking equipment is oversized nd in need of replacement. Ovens are slow and inefficient and other preparation should be consolidated in this same area to provide a more efficient work flow.

5. Tray Make-Up Area: The original kitchen was designed for two tray make-up lines. The second tray make-up line has never been purchased nor installed creating a large unused area between existing administrative offices and the rest of the kitchen. The current tray line is an old straight conveyor designed to be used with a china system with heated pellets for entrees, etc. It is slow and inefficient, both in staffing and space requirements since the patient tray service was changed to insulated compartmentalized trays.

6. Dishroom for Patient Tray Washing: This area is too large and inefficient to handle patient tray washing only. It should be modified to include cafeteria/dining room and catering room tray washing as well. Pot washing should be removed as it interferes with the storage and handling of clean dishes.

7. Meat Preparation and Butchering Area: The original kitchen was designed to do basic butchering of all meats. That system has been abandoned because, at 50% of the planned production capacity, it is not economically feasible to butcher meat. The space has been abandoned for use as basic storage.

8. Supervision Office: This office is isolated from the main administrative area and can be eliminated.

9. Walk-In Day Use Refrigerator and Freezer: These refrigerators and freezers create a traffic flow problem from cold preparation to the tray line in the cafeteria. The refrigerator is oversized for the actual production in the kitchen, and could be eliminated.

10. Employee Cafeteria Servery: The servery is in need of remodeling to improve the traffic flow and self-service program.

11. Dining Room/Soiled Tray Return: A soiled tray return conveyor should be added so that trays can be returned to one central dishroom. Initially, it was planned in the space adjacent to the cafeteria/servery but never installed.

12. Cafeteria Dishroom: This dishwashing system is located outside the central dishwashing area for patient trays. Duplicate staffing and equipment could be eliminated if the dishwasher were centrally located.

13. Walk-in Refrigerator/Freezer and Dry Storage: The walk-in refrigerators and freezers are over-sized, but should not be modified. Additional storage will be required for the 185-bed new mental health center, and will be used for both raw and finished food product, ready for transport, and will help use these areas closer to their capacity.

    Dry Storage is limited and should be expanded at the kitchen level. This will eliminate many continuous trips to the general storage area below the kitchen.

FOOD SERVICE *FACILITIES OVERVIEW*

RECOMMENDATIONS (Cont'd)

SHORT RANGE DEVELOPMENT PLAN TO DIETARY FACILITIES AT SAN FRANCISCO GENERAL HOSPITAL

The dietary facilities at San Francisco General Hospital should be modified for more efficiency and better supervision. The department should be consolidated, returning approximately 3,500 square feet to the Hospital for other use. The following recommendations are summarized on the floor plan of the existing kitchen on the following page.

KITCHEN MODIFICATIONS

1. Bakery and Diet Kitchen: Abandon these spaces and return to hospital use; preferably as a dining, conference center.

2. Dietary Offices: Abandon these spaces and relocate them to the tray make-up line area. Return this space to hospital use, preferably, as a 3,500 to 4,000 square-foot dining room/ conference center.

3. Tray Make-Up Line: Convert this area, (which has never been used) to approximately 1,500 square feet for dietary offices, and better supervision of the tray line and overall production.

4. Cooking Production: Replace worn-out equipment, and eliminate unused production equipment. Consolidate all cooking prep, including meat preparation, into one area. Install a roll-in blast chiller to chill bulk food for the new mental health center.

5. Replace existing tray make-up line with a new carousel tray make-up line to increase the number of trays per minute, and, thereby reducing staff and area.

6. Remodel Dishroom to a central dishroom for insulated trays, as well as cafeteria dining room trays. Remove pot washing to abandoned meat prep area.

7. Meat Prep Area: Abandon this area for meat prep which is to be consolidated in the cook's prep and cooking area. Relocate pot washing equipment.

8. Supervisors Office: Eliminate and consolidate new offices in area number 3. Remove walls so there is direct access between cooking and relocated pot washing.

9. Cold Preparation Pantry: Remove the existing freezer and three small walk-in refrigerators; consolidate all cold food preparation and catering in one area for both SFGH and the new mental health center.

10. Employee Cafeteria and Servery: Remodel and update this facility as a self-service "food court", program.

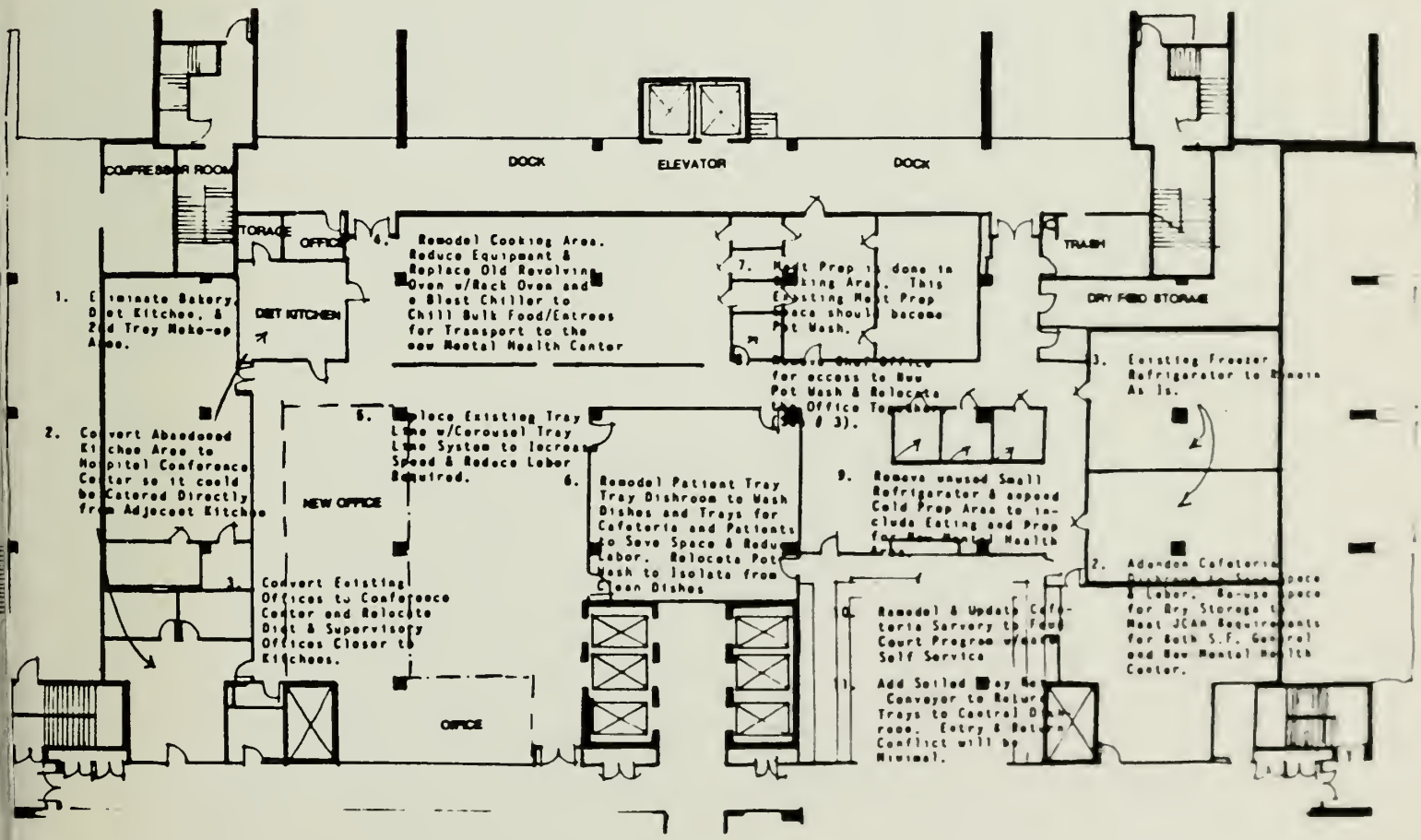
FOOD SERVICE *FACILITIES OVERVIEW*

RECOMMENDATIONS (Cont'd)

11. Soiled Tray Return: Add a soiled tray return conveyor from the dining room to the new central dishroom, area 6. The apparent conflict with cross traffic between entering the servery and dropping off soiled trays will not be a problem. There is enough room to cross easily and there is never a line at that point.

12. Cafeteria Dishroom: Abandon this dishwashing facility and consolidate functions in one dishroom, area 6. Use this space for central dry storage that will meet JCAH (Joint Commission on Accreditation of Hospitals) requirements for both SFGH and the new mental health center.

13. Storage, Freezer, and Walk-in Refrigerator: The existing walk-in refrigerator and freezer may remain even though they are oversized. The additional storage required for both raw and the finished product for the mental health center will better utilize this excess capacity.


DOCK
ELEVATOR
DOCK
DIET KITCHEN
NEW OFFICE
OFFICE
TRASH
DRY FOOD STORAGE
6. Remodel Cooking Area. Reduce Equipment & Replace Old Revolving Oven w/Rack Oven and a Blast Chiller to Chill Bulk Food/Entrees for Transport to the new Mental Health Center
6. Replace Existing Tray Line w/Carousel Tray Line System to Increase Speed & Reduce Labor Required.
6. Remodel Patient Tray Tray Dishroom to Wash Dishes and Trays for Cafeteria and Patients to Save Space & Reduce Labor. Relocate Pot Wash to Isolate from Clean Dishes
9. Remove unused Small Refrigerator & expand Cold Prep Area to include Eating and Prep for
2. Convert Existing Offices to Conference Center and Relocate Diet & Supervisory Offices Closer to Kitchens.
2. Convert Abandoned Kitchen Area to Hospital Conference Center so it could be Catered Directly from Adjacent Kitchen
3. Existing Freezer Refrigerator to Remain As Is.
2. Abandon Cafeteria Dishroom to Save Space & Labor. Re-use Space for Dry Storage to Meet JCAH Requirements for Both S.F. General and New Mental Health Center.
Remodel & Update Cafeteria Servery to Four Court Program with Self Service
Add Soiled Tray Return Conveyor to Return Trays to Central Dishroom. Entry & Return Conflict will be Minimal.

SHORT RANGE NEEDS

DEVELOPMENT PLANS

The short range needs identified in this section describe those needs which if satisfied, would result in construction of new buildings or a change to the external campus environment within the next five years, or up to and including the year 1992.

Five needs have been identified within this time frame:

- Parking garage
- Laboratory for AIDS research
- Mental Health Skilled Nursing Center
- Magnetic Resonance Imaging Center
- Contaminated Waste Storage

PARKING GARAGE

The parking shortage is the most serious problems on the San Francisco General Hospital campus. The Hospital currently uses 584 marked parking spaces within its campus. On a daily basis, the Hospital must accommodate approximately 1,000 outpatients, 280 Emergency Room visits, 2,900 Hospital employees, 900 University employees, and Hospital visitors. The 584 parking spaces are insufficient to meet the parking demand of all these people. Consequently, on street parking in the neighborhoods surrounding the Hospital is used to fill the unmet parking demand. This situation significantly impacts the residents and shopkeepers in these neighborhoods. It is estimated that up to 1,500 cars associated with the Hospital are parking on the neighborhood streets daily.

The parking demand is discussed in detail in the **Transportation Study** section of this report. This study finds a need for construction of approximately 1,000 additional spaces within a parking structure or structures, to accommodate the demand of the Hospital campus within the planning period.

- 140 stalls to replace cars currently parking in the fire lane.
- 110 stalls to eliminate cars illegally parked in the parking lots.
- 144 stalls to replace cars lost to the Mental Health Center.
- 121 stalls to meet the Mental Health Center's projected demand.
- 12 stalls for the MRI.

527 Total Master Plan Demand

- 250 stalls to fill visitor parking demand.
- 250 stalls to eliminate employee parking on neighborhood streets within two blocks of the Hospital.

= = = =

1,027 Total Parking Demand

SHORT RANGE NEEDS — *DEVELOPMENT PLANS*

AIDS RESEARCH CENTER

As part of the overall strategy to combat the current AIDS epidemic, the Department of Public Health, submitted a proposal in September 1986 to the California State Department of Health Services, Office of AIDS to develop a Multidisciplinary Molecular Biology AIDS Research Center. The California State legislature approved the proposal and appropriated $1.5 million in FY 1986-87 to develop the project.

The primary objective of the facility will be to conduct research in various disciplines including molecular biology, virology and neurology in order to accelerate the investigation of developing an AIDS vaccine and a method of killing existing AIDS virions.

MENTAL HEALTH SKILLED NURSING CENTER

A new 185-bed Mental Health Skilled Nursing Center, to be funded by a municipal bond, has been proposed for the SFGH campus. This proposed Center will fill a large gap in the County's psychiatric services. Currently, the patients who would be housed in the new Center are being sent out of county or are being inappropriately housed in acute care settings.

Other sites for the proposed Center were thoroughly investigated. The site at SFGH proved to be the most logical and effective in terms of cost, treatment, and access.

A more detailed description of the Mental Health Skilled Nursing Center is included in Appendix 3 of this report.

KITCHEN REMODEL

The main Hospital kitchen will provide the meals for patients in the proposed Mental Health Center. All food will be carted to the new center via a tunnel connection. The existing kitchen will require major alterations to accommodate these additional meals. An allowance has been set aside in the Mental Health Center's budget to offset the construction cost of this remodel.

This remodel will also address the current need for more efficient and cost effective food delivery within the Hospital. The existing layout of the kitchen does not respond to the current operation resulting in poorly used space and inefficient staffing.

M.R.I.

To provide high quality care, the Hospital must keep pace with changing medical technology. The Magnetic Resonance Imaging machine is the newest technology in imaging, an instrument proven to be valuable at a Trauma Center such as SFGH.

Currently, the Hospital sends its patients to other hospitals in the City for the MRI service. The Hospital has contracted for a temporary modular-type facility to be installed on campus within the next six months. It will be in operation for five years.

CONTAMINATED WASTE STORAGE

Health care centers must deal with appropriate disposal of contaminated waste. San Francisco General Hospital is currently studying various scenarios or improving their waste removal system. In all these studies, it is clear that a centralized, monitored area is needed to facilitate efficient logging, sorting and removal from the campus of all contaminated waste.

PARKING GARAGE STUDY *DEVELOPMENT PLANS*

PARKING GARAGE ALTERNATE LOCATIONS

Four alternate locations for the parking garage have been studied and are summarized in the diagram on page 4.5. The following assumptions have been made to establish parameters for comparing each location:

1. A need for approximately 1,000 cars.
2. 350 square feet per car (in determining the size of the garage).
3. Below grade minimum construction cost of $13,000 per car.
   Above grade minimum construction cost of $10,000 per car.
4. Structure height comparable to surrounding existing buildings.

Because the footprint size varies for each alternate, the number of levels needed to accommodate the 1,000 cars also changes. This is a critical factor in evaluating these schemes. A lower and less obtrusive structure may be more desirable to the community.

SITE A (Block between 23rd & 24th Streets and Utah & San Bruno)

A garage on Site A may have several configurations, depending on how many levels are built above grade and how much of the site is used for the structure and how much would be set aside for other uses. Because the site slopes down to the corner of 24th and Utah Streets, the height of the garage along 23rd Street will always be two levels lower than along 24th Street. A few of the possible configuration and sizes are listed below.

Height The buildings surrounding this site are two- and three-story residential units, approximately 30 feet in height. The height limit, by zoning ordinance, is 40 feet. The maximum height of a garage at the lowest corner of the site, 24th and Utah, would be 45 feet, and would result in a 25-foot height along 23rd Street. This would allow a maximum of six levels of parking.

Size

.	Entire site, six levels	=	1,370	parking stalls
.	3/4 site, six levels	=	1,028	parking stalls
.	2/3 site, six levels	=	924	parking stalls
.	Entire site, four levels	=	914	parking stalls
.	3/4 site, five levels	=	857	parking stalls

Location This site is located in an area which will not interfere with any long-term hospital growth plans. It is within a one block walk to the Hospital.

Efficiency Because of the large area available, accessible on all four sides, a parking garage on Site A would be extremely efficient and economical to construct, even though one to two levels may be below grade.

Access Site A is accessible on all four sides, served by streets which can comfortably accommodate any increased traffic flow. (See Transportation Study)

PARKING GARAGE STUDY

DEVELOPMENT PLANS

SITE B (Open Space)

The large open space surrounded by Buildings 20 and 30, Potrero Avenue, and the Main Hospital Building is the location of Site B.

Height Building 20 and 30 are approximately 60 feet in height. With one level below grade, a garage of this height could accommodate 8 levels of parking.

Size

. Entire site (210' x 185')
8 levels = 888 parking stalls

Location This site is the focal point of the San Francisco General Hospital campus. It provides open green space and a view corridor to Twin Peaks on the otherwise densely constructed campus.

Efficiency A garage on this site, if constructed primarily above grade, would be very efficient.

Access Site B is accessible from the Hospital Drive and Potrero Avenue, though the primary access would be from Potrero. An entry/exit on Potrero would have to be carefully designed so that traffic circulation is not impeded.

SITE C (North of Bldg. 80/90)

Site C is located just North of Bldg. 80/90, between it and the proposed Mental Health Center. Because the site is small, it could only be used in conjunction with another parking garage.

Height A parking garage on Site C must have its top level at the entry level of the proposed Mental Health Center, because this serves as the main access to the Mental Health Center. Due to topography and soil conditions, four levels, primarily underground, are the most that could be constructed here.

Size

. Entire site (232' x 116')
4 levels = 307 parking stalls

Location This site is the most distant from the Main Hospital, though still within walking distance. It's location between two buildings is not ideal because it precludes any expansion capabilities for those buildings.

Efficiency Because the site is small and constructed primarily underground the garage would be inefficient and costly. The cost per stall could be two to three times that of stalls in structures at the other sites.

Access Potrero Avenue would serve as the major access point with a possible secondary entrance off the Service Drive. Because of the fewer number of cars parking here, circulation to and from Potrero should not be a problem.

PARKING GARAGE STUDY — *DEVELOPMENT PLANS*

SITE D (Parking Lot C)

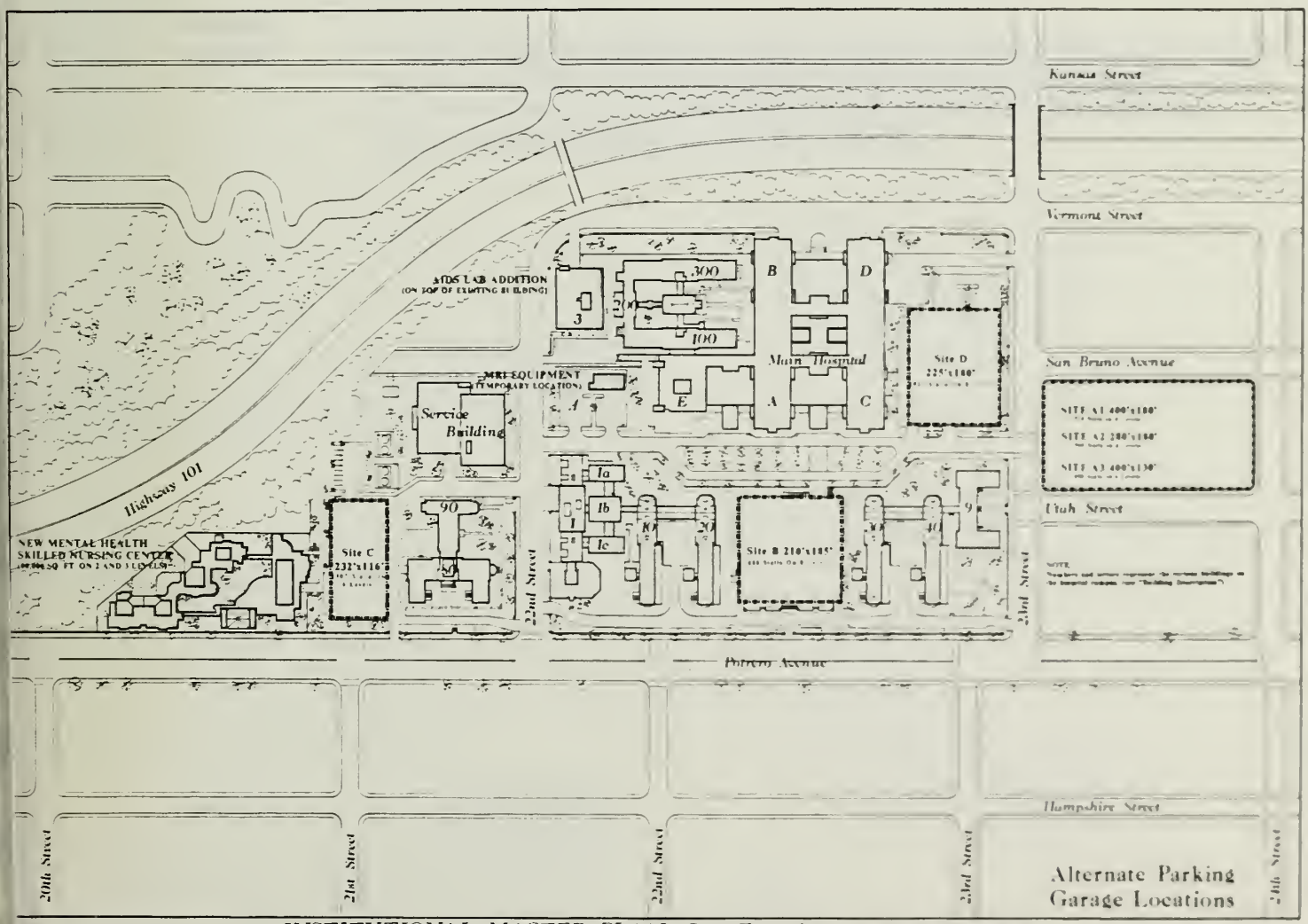
Site D is adjacent to the Main Hospital Building, between it and 23rd Street. It is limited on the East side by the Emergency access drive and parking.

Height The Main Hospital is about 100 feet tall, buildings across 23rd Street are about 30 feet tall. Using an average of these two heights, the resulting allowable height for a garage at this location would be 65 feet, or 8 levels.

Size . Entire site (225' x 180')
8 levels = 925 parking stalls

Location Site D has been designated as an ambulatory care zone in the Long Range Development Plan. A garage built in this location would not be advisable from a health care planning perspective.

Access Since the only access to a garage at this site would be from 23rd Street, circulation and traffic could become a problem. 23rd Street is already one of the busiest Streets in the neighborhood, and the additional traffic generated by a 900-car garage would make its service level unacceptable.



PARKING GARAGE STUDY *DEVELOPMENT PLANS*

RECOMMENDATION

SITE A

Of the four sites available, Site A, the Block between 23rd and 24th Streets and Utah and San Bruno Streets, is the best location for a parking garage. Its advantages are:

Location

1. While its location is proximate to the main hospital building, (within a one-block) it but does not impact long-term future need for replacement or relocation of hospital-based services.

Economy

2. Because of the large area available, the cost per parking stall for a garage at this location will be considerably less than at Site C, and less than at Site B or D.

Access

3. Site A is bounded by streets on all four sides. This provides the opportunity for multiple access points for vehicle circulation, which can help relieve traffic congestion in the neighborhood. None of the other sites have this opportunity.

Height

4. Site A can provide parking for more cars on fewer levels. This will result in a lower structure height, a preference expressed by the Hospital's neighbors.

Planning Flexibility

5. The large, square block footprint of Site A affords various configurations for the usage of the block and shape of the parking garage. The garage may use the entire site, resulting in a very low structure; or it may fit on up to three-fourths of the site, resulting in a higher structure, but with land available for other uses.

PARKING GARAGE STUDY

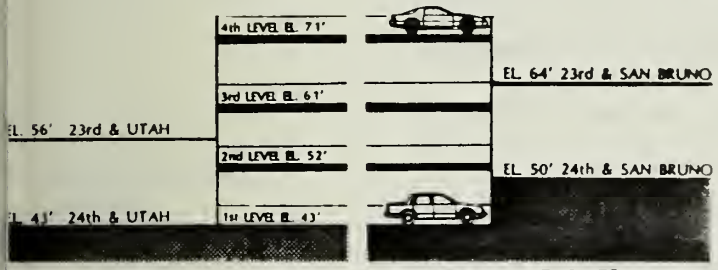
DEVELOPMENT PLANS

SITE A - GARAGE CONFIGURATIONS

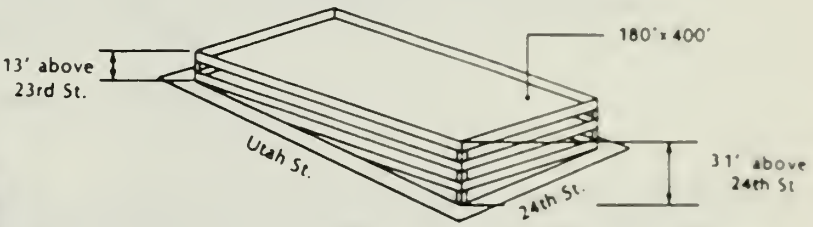
Three configurations, or schemes, for the parking garage on Site A are presented here. The diagrammatic sections on the left indicate existing heights at the four corners of Site A and their relationship to proposed levels for the garage. The isometric diagrams on the right indicate the approximate size and location on the block of each scheme.

SCHEME 1

Scheme 1 has four levels of parking. It is the lowest in height of the three schemes. It utilizes the entire block bounded by 23rd and 24th Streets on the North and South, and San Bruno Avenue and Utah Streets on the east and west except for setbacks from the street. 900 to 1,000 cars could be accommodated on Scheme 1's four levels on this square block area.

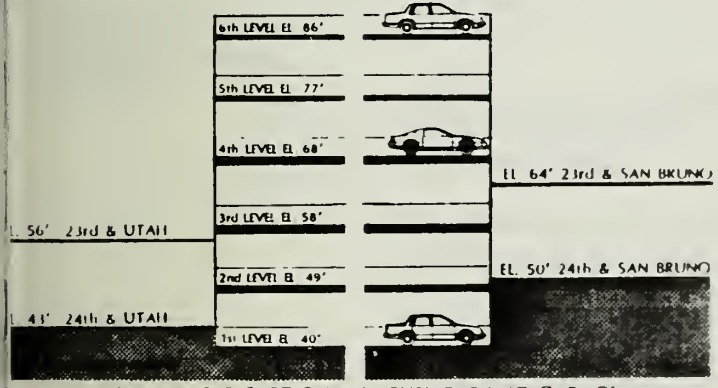

4th LEVEL EL. 71'
3rd LEVEL EL. 61'
2nd LEVEL EL. 52'
1st LEVEL EL. 43'
EL. 64' 23rd & SAN BRUNO
EL. 50' 24th & SAN BRUNO
EL. 56' 23rd & UTAH
EL. 43' 24th & UTAH

DIAGRAMMATIC SECTION - 4 LEVEL PARKING GARAGE

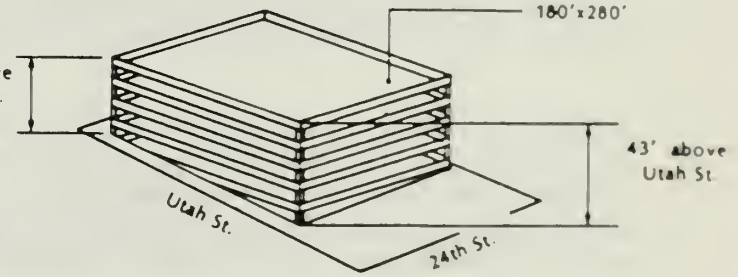


SCHEME 2

Scheme 2 has six levels of parking and occupies approximately three-fourths of the site closest to the Hospital. 1,028 cars could be accommodated in this configuration.

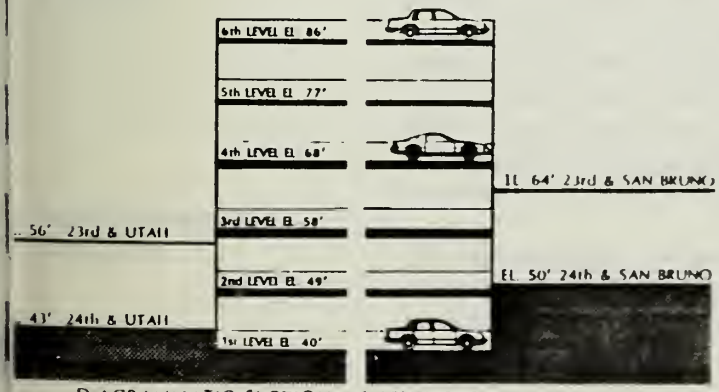

6th LEVEL EL. 86'
5th LEVEL EL. 77'
4th LEVEL EL. 68'
3rd LEVEL EL. 58'
2nd LEVEL EL. 49'
1st LEVEL EL. 40'
EL. 64' 23rd & SAN BRUNO
EL. 50' 24th & SAN BRUNO
EL. 56' 23rd & UTAH
EL. 43' 24th & UTAH

DIAGRAMMATIC SECTION - 6 LEVEL PARKING GARAGE

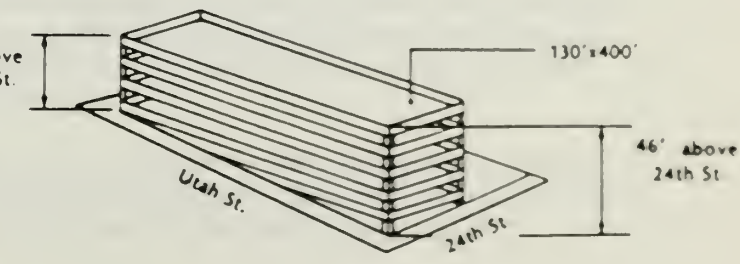


SCHEME 3

Scheme 3 also has six levels of parking. It occupies approximately two-thirds of the site closest to Utah Street. About 924 cars could be accommodated in this configuration.


6th LEVEL EL. 86'
5th LEVEL EL. 77'
4th LEVEL EL. 68'
3rd LEVEL EL. 58'
2nd LEVEL EL. 49'
1st LEVEL EL. 40'
EL. 64' 23rd & SAN BRUNO
EL. 50' 24th & SAN BRUNO
56' 23rd & UTAH
43' 24th & UTAH

DIAGRAMMATIC SECTION - 6 LEVEL PARKING GARAGE



SHORT RANGE DEVELOPMENT PLAN

DEVELOPMENT PLANS

DESCRIPTION

The Short Range Development Plan and aerial views on the following pages depict the new construction projects anticipated within the next five years on the San Francisco General Hospital campus.

The proposed development generally follows the Master Site Plan developed in 1967 in conjunction with planning the new hospital building.

MRI EQUIPMENT

In an effort to keep the cost of the new MRI equipment down and options for future development open, the Hospital has opted to use a modular structure designated to accept an MRI unit. It will be located in the southeast corner of parking lot "A", adjacent to the outpatient wing of the Main Hospital building.

The MRI unit should be in operation by February 1988.

AIDS RESEARCH CENTER

The new AIDS research laboratory of approximately 28,700 gross square feet will be located on top of the existing Pathology Building (Building 3) at the corner of Vermont and 22nd Street. The proposed addition will be two stories above a mechanical interstitial floor. This will result in a total building height 6 stories above grade, about 90 feet tall.

It is projected that the AIDS Laboratory will be constructed by August of 1989.

MENTAL HEALTH SKILLED NURSING CENTER

The construction of the Mental Health Skilled Nursing Center will be funded by general obligation bonds. Issuance of Bonds for the project was approved by 80% of the electorate in November of 1987.

The Center, to be located at the northern end of the campus, is composed of two principal buildings around a central courtyard. The buildings will be three and two stories high and contain a total of 89,000 square feet. The existing brick wall along Potrero Avenue will be retained, and the new buildings will be set back from it. The size and scale of the Center is in keeping with the residential neighborhood across the street. A more detailed description can be found in Appendix III.

It is anticipated that the Mental Health Skilled Nursing Center will be completed by 1992.

PARKING GARAGE

The City is planning to build a parking garage on the recommended location, the block bounded by 23rd, Utah, 24th and San Bruno Streets. It is highly desired for the parking garage to be in operation before construction of the Mental Health Skilled Nursing Center is begun. The Mental Health Center will be constructed on existing parking lot "E" and will displace 144 parking spaces. In the event this parking garage is not constructed, necessary interim parking arrangements will be made to accommodate the loss of parking due to construction of the Mental Health Center.

FOOD SERVICE REMODEL

The remodeling of the existing kitchen on the second floor of the Hospital must occur in conjunction with construction of the Mental Health Center. Recommendations for the food service remodeling are included in the Facilities Overview section, on page 3.37.

AIDS LAB ADDITION
(ON TOP OF EXISTING BUILDING)

MRI EQUIPMENT
(TEMPORARY LOCATION)

NEW MENTAL HEALTH
SKILLED NURSING CENTER
(90,000 SQ. FT. ON 2 AND 3 LEVELS)

Service Building

Main Hospital

NEW PARKING STRUCTURE

Highway 101

Vermont Street

San Bruno Avenue

Utah Street

22nd Street

23rd Street

Potrero Avenue

Hampshire Street

20th Street

21st Street

22nd Street

23rd Street

24th Street

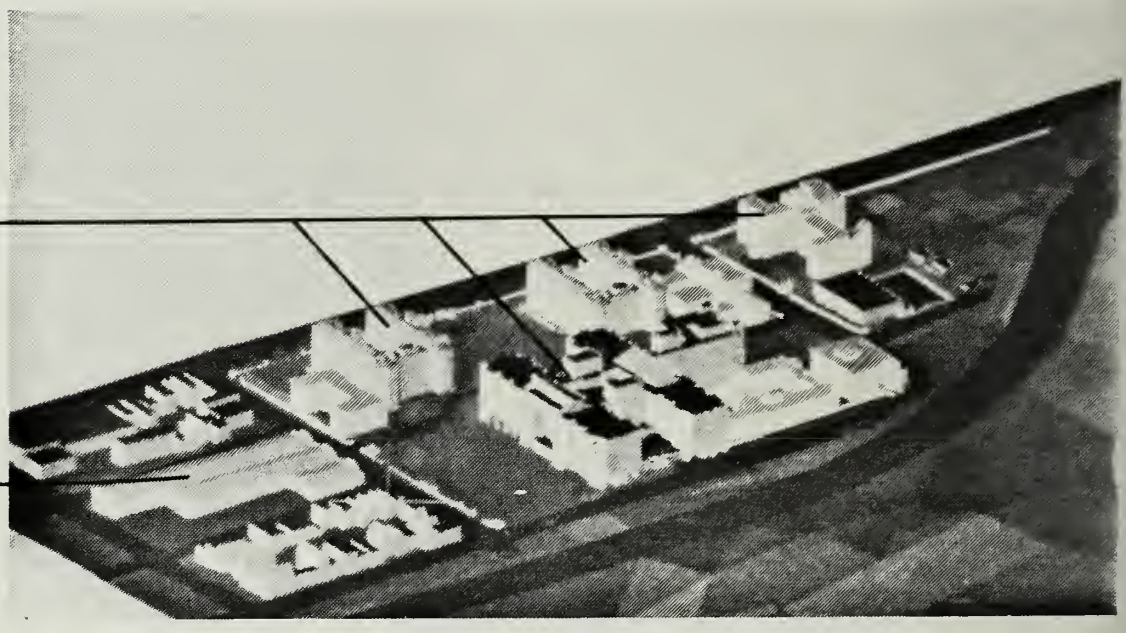
SHORT RANGE DEVELOPMENT PLAN

INSTITUTIONAL MASTER PLAN · San Francisco General Hospital

City and County of San Francisco

KAPLAN · McLAUGHLIN · DIAZ
Architects-Planners
Gordon H. Chong & Associates
Associate Architects

AERIAL PERSPECTIVE FROM POTRERO HILL



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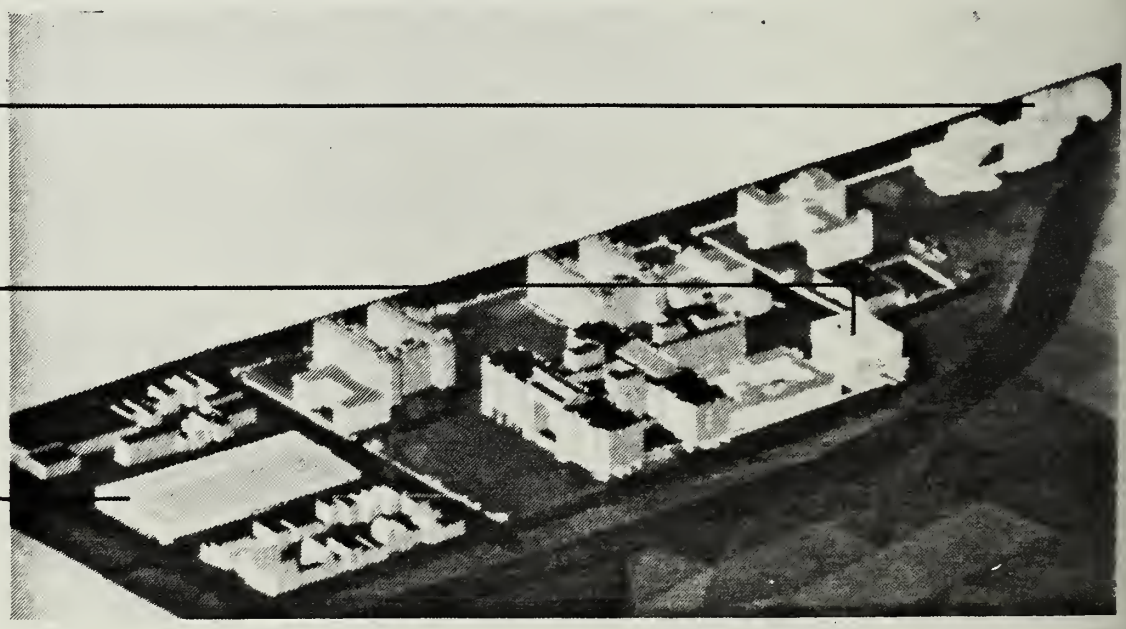


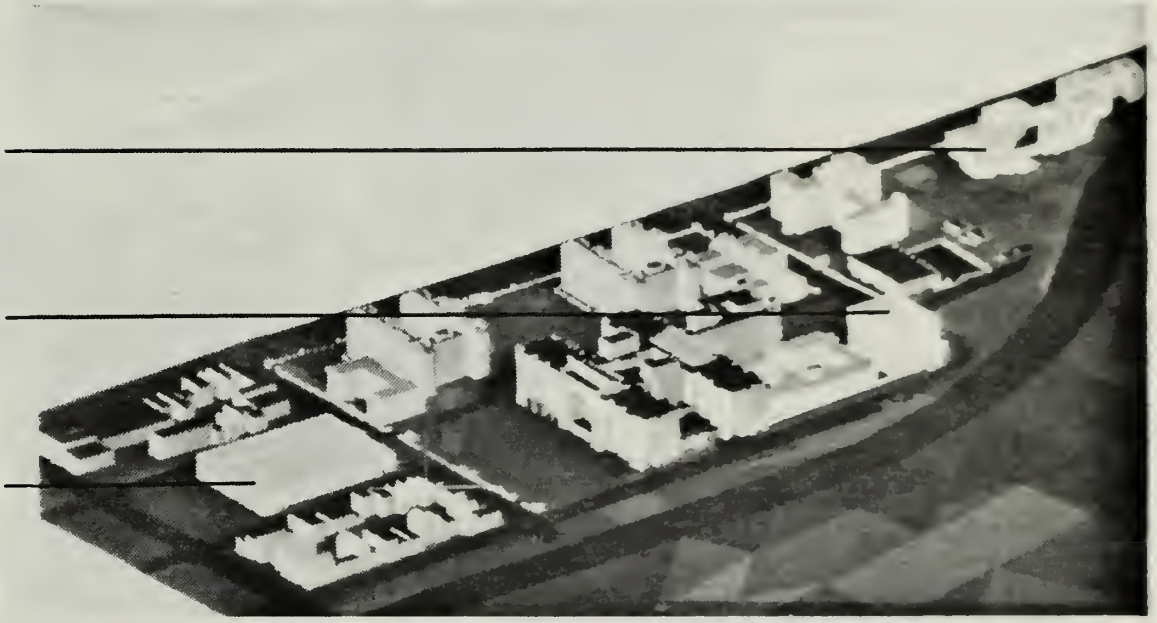
PROPOSED -SCHEME 1

SHORT RANGE DEVELOPMENT PLAN *DEVELOPMENT PLANS*

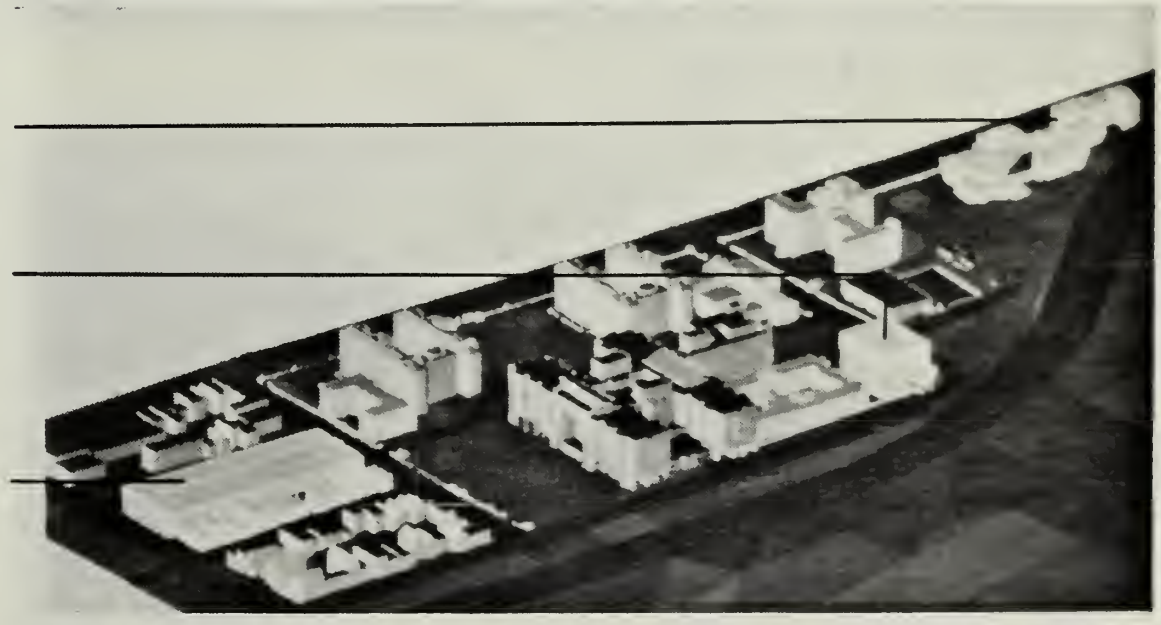
BUILDING BULK

The images on this and the following pages are computer generated representations of the proposed new buildings on the San Francisco General Hospital campus. Each view shows 2 or 3 images: an existing image (without new buildings); and three images of the same view, as it would appear with the proposed short-range projects, with a view for each of the three garage schemes.

AERIAL PERSPECTIVE FROM POTRERO HILL

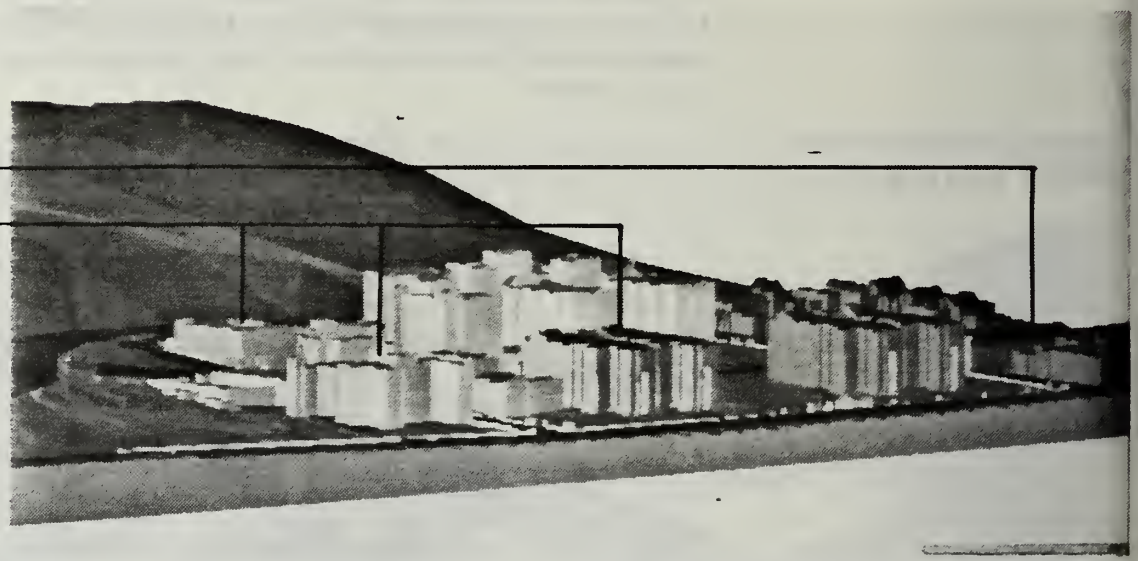


PROPOSED -SCHEME 2



PROPOSED -SCHEME 3

VIEW FROM
NORTHWEST ALONG
POTERO AVENUE



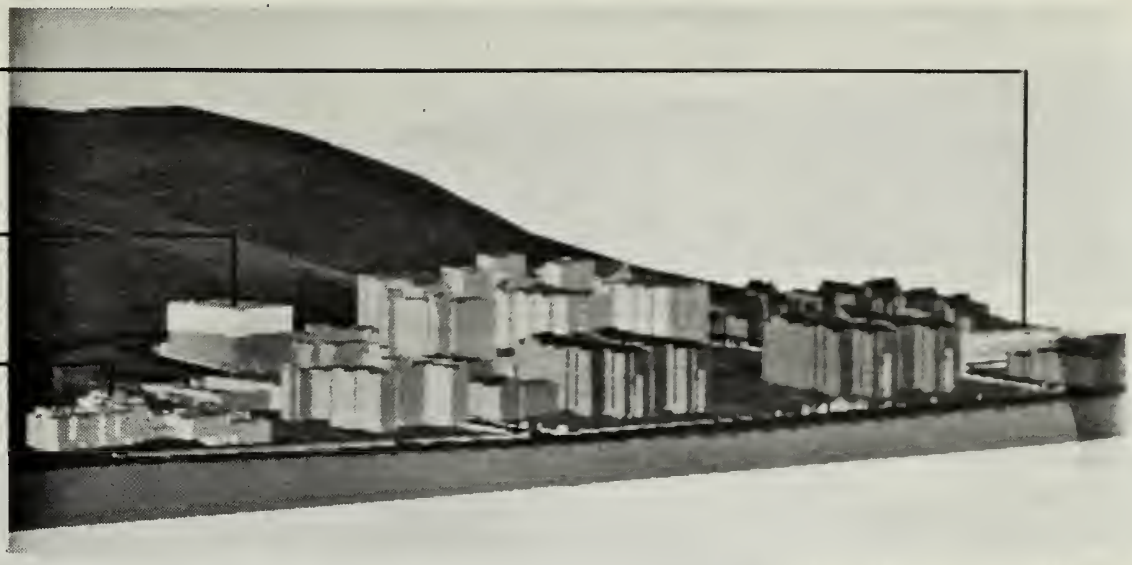
EXISTING

VIEW FROM NORTHWEST ALONG POTRERO

4-LEVEL PARKING GARAGE COVERING FULL BLOCK

AIDS LABORATORY ADDITION

MENTAL HEALTH SKILLED NURSING CENTER

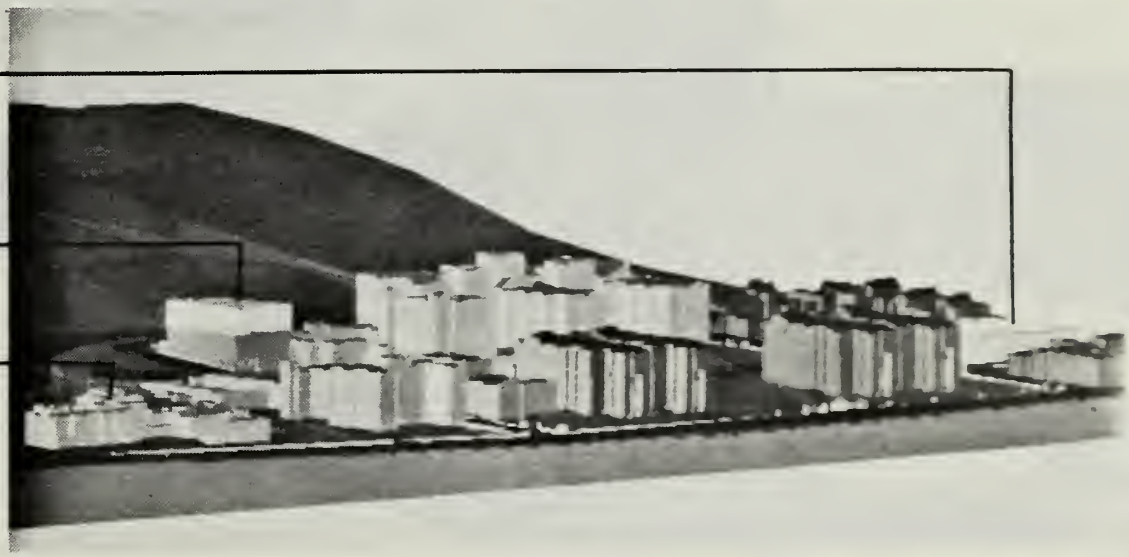


PROPOSED- SCHEME 1

6-LEVEL PARKING GARAGE COVERING 2/3 OF BLOCK

AIDS LABORATORY ADDITION

MENTAL HEALTH SKILLED NURSING CENTER



PROPOSED- SCHEME 2

6-LEVEL PARKING GARAGE ON UTAH ST.

PROPOSED HOUSING ON SAN BRUNO STREET

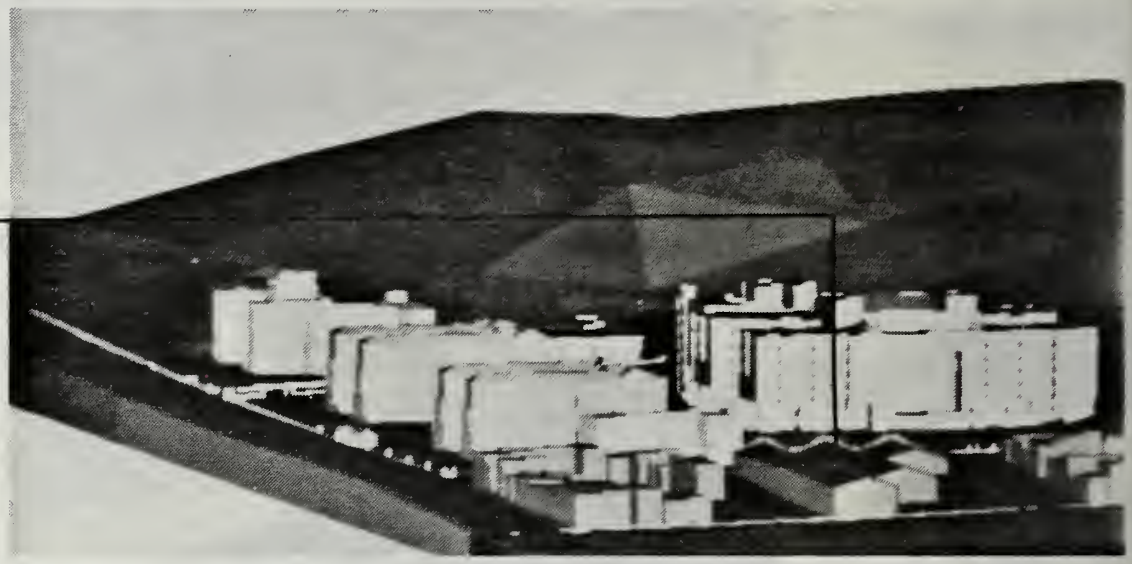
AIDS LABORATORY ADDITION

MENTAL HEALTH SKILLED NURSING CENTER

PROPOSED - SCHEME 3

VIEW FROM SOUTHWEST AT 24th STREET AND POTRERO

P.U.C. FACILITY



EXISTING

VIEW FROM SOUTHWEST AT 24th STREET AND POTRERO

MENTAL HEALTH SKILLED NURSING CENTER

4-LEVEL PARKING GARAGE COVERING FULL BLOCK

PROPOSED -SCHEME 1

MENTAL HEALTH SKILLED NURSING CENTER

6-LEVEL PARKING GARAGE COVERING 3/4 OF BLOCK

PROPOSED -SCHEME 2

MENTAL HEALTH SKILLED NURSING CENTER

6-LEVEL PARKING GARAGE ALONG UTAH STREET

PROPOSED -SCHEME 3

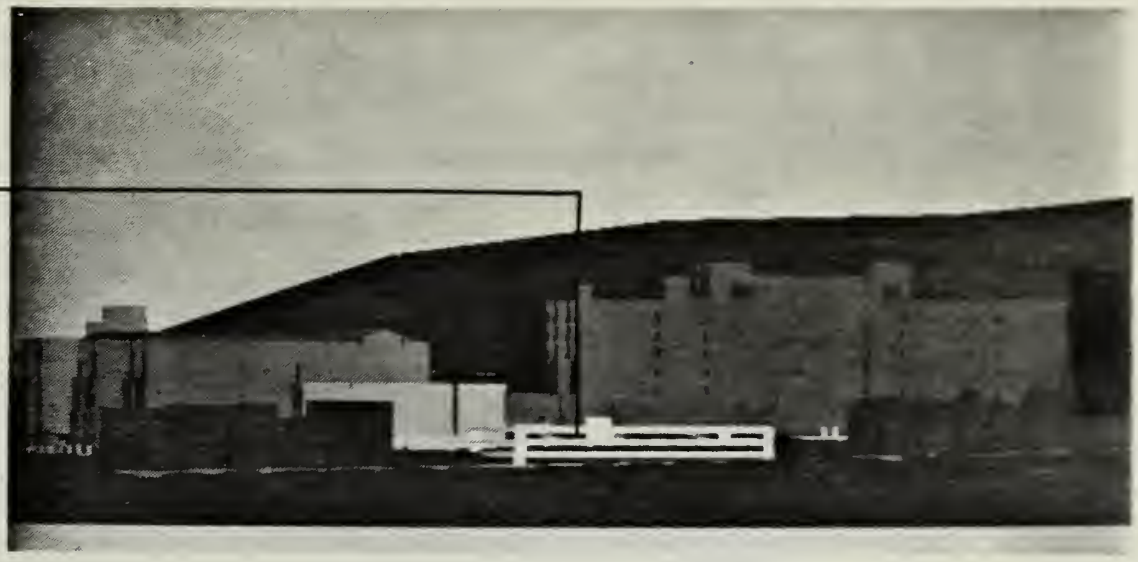
VIEW LOOKING NORTH FROM 24th STREET

P.U.C. FACILITY

EXISTING

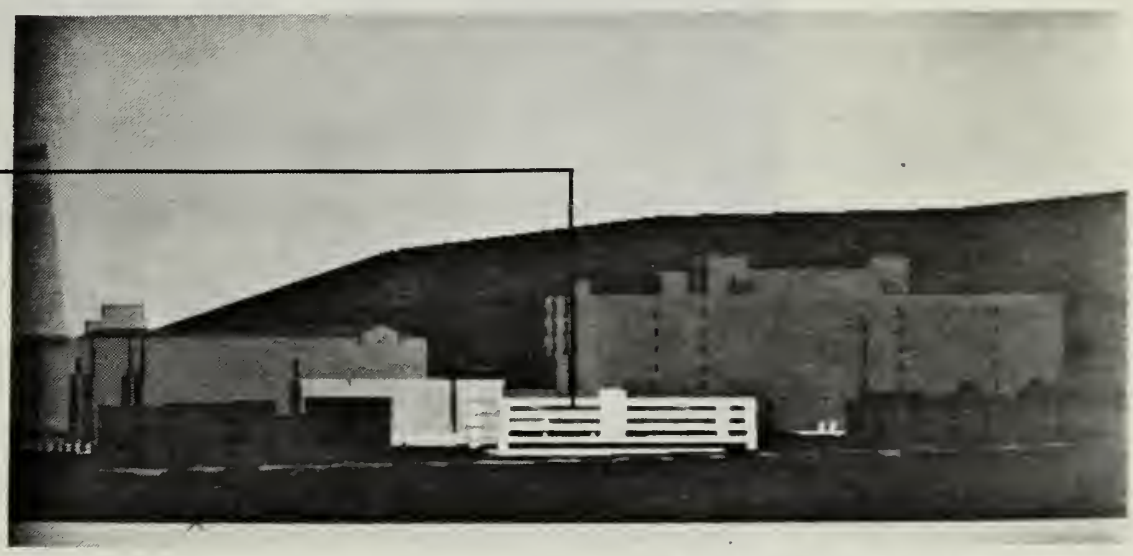
VIEW LOOKING NORTH FROM 24th STREET

4-LEVEL PARKING GARAGE COVERING FULL BLOCK



PROPOSED- SCHEME 1

6-LEVEL PARKING GARAGE COVERING 2/3 OF BLOCK



PROPOSED- SCHEME 2

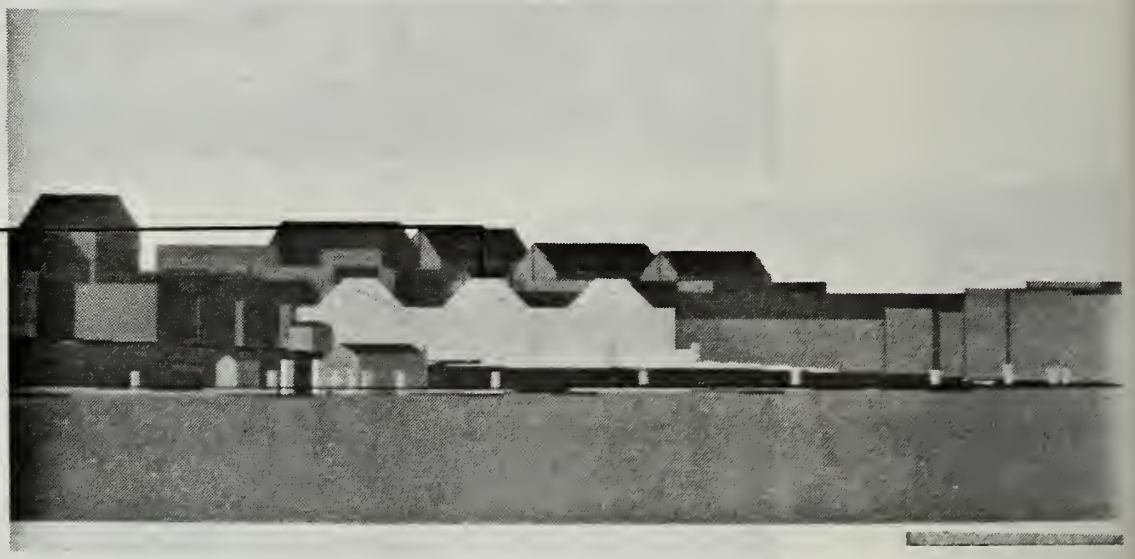
PROPOSED HOUSING ON SAN BRUNO AVENUE

6-LEVEL PARKING GARAGE ON UTAH STREET

PROPOSED- SCHEME 3

VIEW FROM 23rd AND POTRERO STREETS , LOOKING SOUTHEAST

P.U.C. FACILITY



EXISTING

VIEW FROM 23rd AND POTRERO STREETS, LOOKING SOUTHEAST

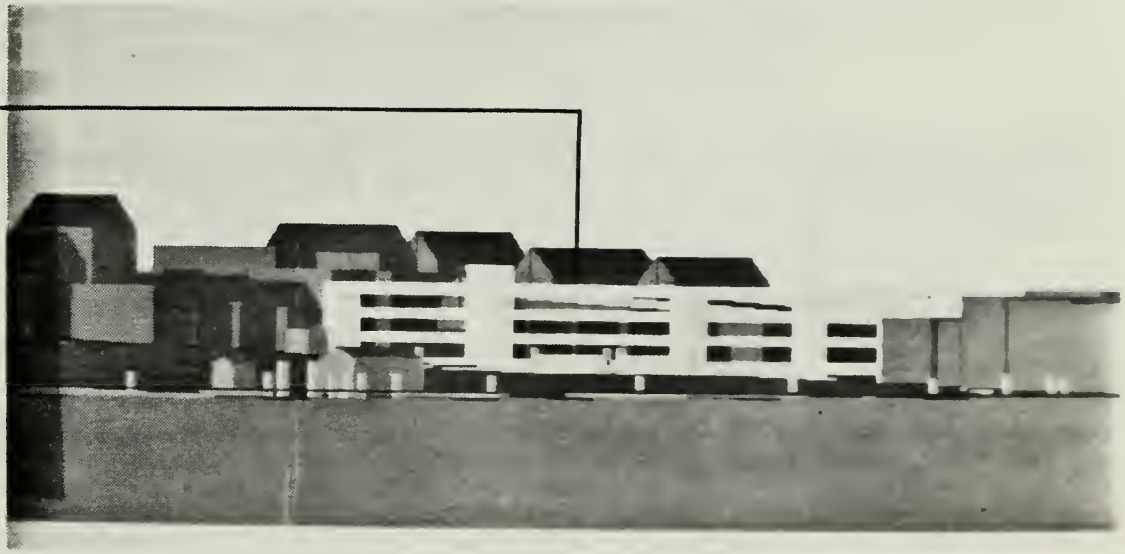
4-LEVEL PARKING GARAGE COVERING FULL BLOCK

(2 levels above grade on 23rd street)

PROPOSED- SCHEME 1

6-LEVEL PARKING GARAGE COVERING 3/4 OF BLOCK

(3 levels above grade on 23rd street)



PROPOSED- SCHEME 2

6-LEVEL PARKING GARAGE ALONG UTAH STREET

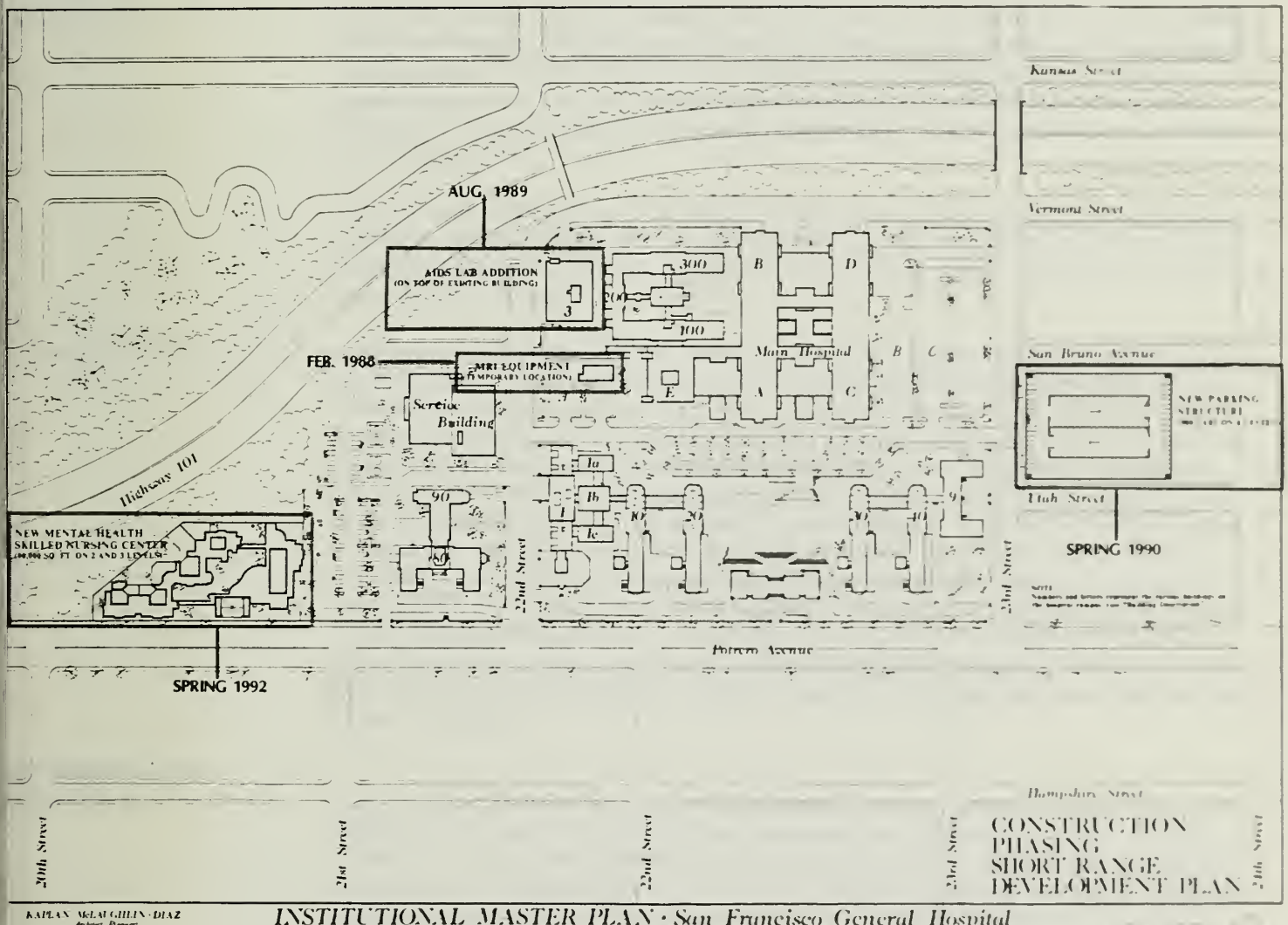
PROPOSED HOUSING ON SAN BRUNO AVENUE

PROPOSED- SCHEME 3

NEIGHBORHOOD IMPACT *DEVELOPMENT PLANS*

CONSTRUCTION PHASING

This diagram indicates the anticipated completion dates of the proposed construction projects on the SFGH campus.



KAPLAN McLAUGHLIN DIAZ
Architect Partners
Gordon H Chong & Associates
Associate Architects

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City and County of San Francisco

NEIGHBORHOOD IMPACT — *DEVELOPMENT PLANS*

The proposed short range projects should have minimal adverse impact on the surrounding neighborhoods. A positive impact should be perceived with completion of the proposed parking structure, which would relieve the current on-street parking shortage in the neighborhood.

MENTAL HEALTH SKILLED NURSING CENTER

The Mental Health Skilled Nursing Center will be located on land currently used as a parking lot for the Hospital. The timing of this project is related to the construction of the proposed parking garage, in that to mitigate the additional demand for parking in the neighborhood, the garage is planned to be in place before construction of the Mental Health Center would commence. The parking garage is sized to accommodate the loss of parking lots on which the Center is built.

The proposed configuration of the Mental Health Center is a two and a three-story building around a central courtyard. The heights are lower than the other buildings on campus, and will be comparable to the height and scale of existing development across Potrero Avenue and to the North of the site.

PARKING GARAGE

The preferred site for the Parking Garage, on the block bounded by Utah, San Bruno, 23rd and 24th Streets, is currently held by the City's Public Utilities Commission. This land has been declared surplus property by the P.U.C., and negotiations are currently in progress to redesignate the property for a combination of parking and other uses. The P.U.C. has a non-revenue vehicle maintenance facility located at this site. This warehouse type structure is located on the northern two/thirds of the block. It's height is about 20 feet rising to 30 feet at the top of each gable roof. To mitigate the visual impact of the proposed parking garage, it is suggested that the new structure be similar in height to the existing P.U.C. warehouse. It is anticipated that traffic flows in the neighborhood should not be adversely affected if the access points to the garage are properly designed. Two entries should be provided, a visitor entry on 23rd street and a staff entry on Utah or 24th Street. This will direct the majority of the traffic onto Utah and 24th Streets which can easily accommodate the increased volume. Please refer to the "Traffic Impacts" section on page 25 of the Transportation Study for more detailed information.

AIDS RESEARCH CENTER

The AIDS Research Center addition will relocate laboratory functions currently housed in other areas on campus. There will be no added personnel or functions because of the project. It will be atop the existing Pathology building, adding about 40 feet to the existing height of the structure. The finished building will be lower than the adjacent Main Hospital Building, and will not block views from housing units across the freeway. The City's environmental impact review office has issued a negative declaration of environmental impact for this project.

LONG RANGE DEVELOPMENT PLAN

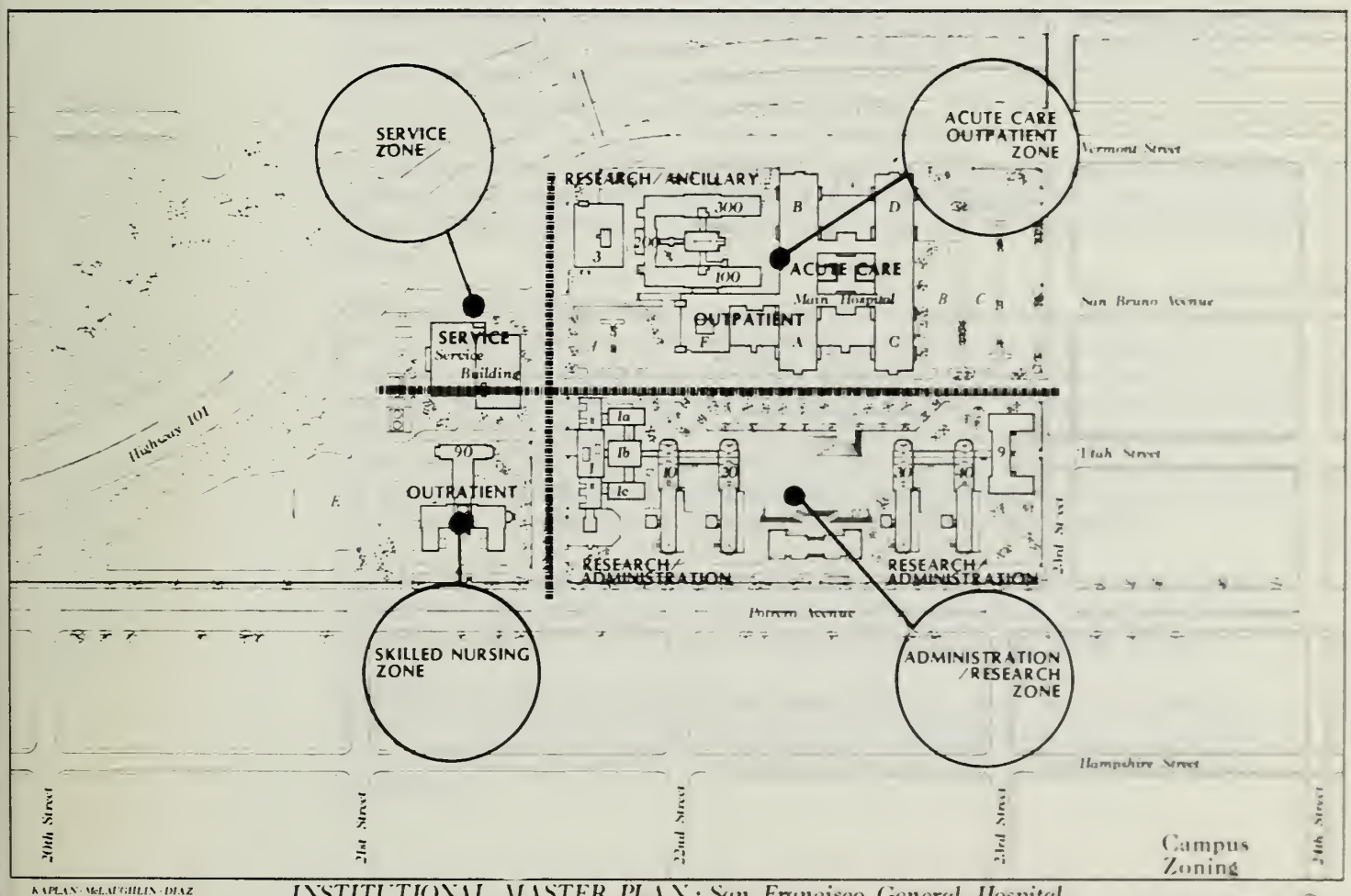
DEVELOPMENT PLANS

ZONING

The existing layout of the San Francisco General Hospital campus can be roughly divided into four planning sections, or zones, which establish direction for future development. The southeast quadrant contains the main hospital building and is used primarily for acute and ambulatory care functions. The southwest quadrant, along Potrero Avenue, contains the old 10, 20, 30, and 40 buildings which are used primarily for research and hospital administration functions. The northwest quadrant, location of the proposed Mental Health Skilled Nursing Center, is the ideal place for skilled nursing functions. The fourth zone, in the northeast quadrant, is the service zone and contains the Hospital power plant.

The four zones are divided by the main hospital drive on a north-south axis and 23rd Street on an east-west axis.

Future development should respect this established zoning pattern.



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Urban Planners
Gordon H Chong & Associates
Associate Architects

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City and County of San Francisco

LONG RANGE DEVELOPMENT PLAN *DEVELOPMENT PLANS*

NEEDS

Needs for future development, beyond five years, on the campus are described below. At this time, none of these have been identified as specific projects. The needs have been listed in response to assessment of current hospital use and projected direction of future development.

An area for eventual Hospital replacement and/or expansion. Though this will not occur in the near future, space must be set aside in order to preclude other, non-compatible construction which might conflict with this long-term need.

An evaluation of delivery of Emergency/Trauma Services. San Francisco General Hospital currently treats about 280 patients daily in their Emergency Department. The existing space has become overcrowded and inefficient. An evaluation of the current operation and the physical layout of the department is necessary.

The increasing trend toward ambulatory care, or outpatient, services. With recent changes in government reimbursement policies for hospital care, the emphasis in health care has shifted toward more ambulatory care treatment. San Francisco General Hospital has, of course, followed this course. The outpatient services are heavily used, as can be attested by the thirty to ninety-day waiting lists for many of the clinics.

An evaluation of how to effectively deliver ambulatory care services in the future is currently underway. Many options are being studied. These include dispersal of services to community programs, utilizing existing resources in the Department of Health, and expansion within the campus.

Replacement of buildings which are no longer viable for continued use. Most of the older buildings on the campus were built in 1915 and are now more than seventy years old. They have far exceeded expectations for "useful life" (generally, thought to be about forty years for a hospital structure). Upgrading these structures to meet current building code requirements would be costly and complicated. It can be expected that as the need grows to upgrade these buildings to make them more efficient and appropriate for their current functions, the decision will be made to replace some of the buildings entirely. Clearly, this need must be balanced with the intent to maintain the architectural quality that these buildings provide.

Improvement of circulation on the main entry drive. This drive, which connects 23rd and 22nd Streets, is the drop-off area for the Main Hospital and the ambulatory clinics. Because it is only two lanes wide it often becomes congested and delays traffic to the Hospital.

Availability of parking as new functions are added to the campus. The current parking problem must not be exacerbated. Any new functions which are added to the campus must include a solution to any additional need for parking they would general as part of their construction.

LONG RANGE DEVELOPMENT PLAN

DEVELOPMENT PLANS

RECOMMENDATIONS

The Long Range Development Plan on the following fold-out page describes where the potential future needs of the hospital could be met. Certain functional zones have been defined for future growth or expansion. These zones are in keeping with the zoning framework discussed earlier.

ACUTE CARE EXPANSION

The area currently occupied by Building 100/200/300, directly to the north of the Main Hospital Building, has been designated for acute care expansion or replacement. It is a contiguous relationship with existing acute care functions, and would appropriately accommodate future growth or replacement needs.

EMERGENCY EXPANSION

The area to the south of the Main Hospital Building, currently the Emergency parking lot, has been zoned for expansion of Emergency services. This area is contiguous to the existing Emergency department and would appropriately accommodate expansion needs, should that become necessary. If an addition to the Emergency department were to be built, any displaced parking spaces would have to be accommodated.

AMBULATORY CARE EXPANSION

Two zones have been defined for ambulatory care facilities should it become necessary to provide more ambulatory care on campus. These zones are located to either side of the Main Hospital Building, along the Main Entry Drive. These locations provide good access for the patients who would use the facility, and are near the proposed parking garage. They are also in proximity to existing ambulatory and acute care services.

BUILDING REPLACEMENT/ DEMOLITION

In terms of long range development and "image" of the San Francisco General Hospital, it is recommended that Building 10, 20, 30, 40 and 80/90 be retained as long as possible. These buildings have established a character for the hospital which can never be replicated.

The other older buildings on campus (Buildings 1, 9, and 100/200/300) are not so prominently located nor distinguished in their architectural features. It is suggested that, as the need arises, they be replaced with either parking, if required, or more functional and appropriately designed buildings (e.g. Building 100/200/30 replaced with an acute care building). The functions housed in the buildings recommended for demolition may be relocated in additions between Building 10 and 20, and Buildings 30 and 40. These additions could present two advantageous opportunities for these old structures: the infill would act as a seismic brace for the existing structures, bringing them into compliance with current building codes; and the infill would improve the useability of the combined structures floor plates.

LONG RANGE DEVELOPMENT PLAN

DEVELOPMENT PLANS

MAIN ENTRY DRIVE

It is recommended that the Main Entry Drive, in the south to north direction, be widened in the near future. This can be accomplished by reducing the width of the existing median and adding a passing lane. Additional curbside parking may be added at the same time.

PARKING

If functions are added to the hospital complement (such as an Ambulatory Care Center) provisions must be made for the increased parking demand. Zones have been identified on the Long Range Plan for additional parking. Future buildings, however, may also have to accommodate internal parking garages.

FIRE LANE IMPROVEMENT

When the existing parking is eliminated from the fire lane along Potrero Avenue, strong consideration should be given to enhancing the remaining open space with enriched landscaping.

RESEARCH

Research is an integral part of a major tertiary care and teaching hospital such as SFGHMC. Space must be set aside for the future replacement and expansion of current research and teaching activities. A long-term phased replacement and moderate expansion program would be most likely given the limitations on funding for such structures.

EMERGENCY CARE ZONE

IMPROVE PEDESTRIAN ACCESS TO EMERGENCY

Vermont Street

PARKING ZONE

ACUTE CARE ZONE

3

B

D

Main Hospital

OUTPATIENT CARE ZONE

E

A

C

OUTPATIENT CARE ZONE

San Bruno Avenue

WIDEN DRIVEWAY

Service Building

RESEARCH ADMIN ZONE

PARKING ZONE

Utah Street

Highway 101

90

80

10

20

RESEARCH / ADMIN ZONE

PARKING ZONE

30

40

22nd Street

23rd Street

NOTE:
Numbers and letters represent the various buildings on the hospital campus. (see "Building Description")

LANDSCAPE AND IMPROVE FIRE LANE

Potrero Avenue

IMPROVE TRAFFIC SIGNALIZATION AND CROSSWALK STRIPING

Hampshire Street

20th Street

21st Street

22nd Street

23rd Street

24th Street

LONG RANGE DEVELOPMENT PLAN

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City and County of San Francisco

CONFORMITY WITH CITY'S COMPREHENSIVE PLAN

DEVELOPMENT PLANS

The Comprehensive Plan for the City and County of San Francisco is a long-term general plan for the improvement and development of the City and County. The plan functions as a guide in coordinating development throughout the City and County.

The Comprehensive Plan includes sections that deal with Urban Design and Transportation, the specific sections that relate to this physical planning study. The following identifies the policies in these sections of the Comprehensive Plan which are addressed in this Institutional Master Plan.

URBAN DESIGN PLAN COMPREHENSIVE PLAN OF THE CITY AND COUNTY OF SAN FRANCISCO

Policy One: Promote harmony in the visual relationships and transitions between new and older buildings.

This policy is addressed in the Institutional Master Plan (IMP) with respect to the height and bulk of new construction on the campus. It will be further developed as those projects identified in the IMP are refined during the architectural design process.

The IMP reflects this policy in its commitment to the following:

- Retention of those older structures that define the campus along Potrero Street.
- Respect to the scale, height and streetscape of the adjacent neighborhoods in new construction proposed within the hospital campus at its boundaries.
- Respect for the principal existing landscaped spaces within the campus through their retention and long-term enhancement.

The principal projects identified in the IMP address this policy as follows:

SHORT RANGE

- **Mental Health Skilled Nursing Center:** In its three-story height, in the articulation of its Potrero Street facade, and in its overall building massing, this project would act as an appropriate transition from the lower scale development to the north and west along Potrero, and the remainder of the hospital campus to the south.

- **AIDS Research Center:** Sympathetic in height to adjacent campus structures, this vertical addition to an existing structure would visually complete a building that was initially designed for this expansion.

- **Parking Garage:** Because the height of suggested alternatives relate to the height of existing housing around the recommended site, the opportunity exists for a smooth transition between this proposed garage and existing neighborhood development.

LONG RANGE

- **Research Zone:** Potential additions between the wings of buildings 10/20 and 30/40 should not deter from the existing image in that these additions would be substantially setback from the existing front edge of the buildings, allowing the existing buildings to remain visually dominant.

CONFORMITY WITH CITY'S COMPREHENSIVE PLAN *DEVELOPMENT PLANS*

- **Ambulatory Care Zone**: Any building constructed in this area is adjacent to the existing Main Hospital Building. This would allow a building of a lower height to act as a transition between the Hospital and its neighbors.

- **Parking Zone**: It is recommended that any parking constructed in these areas be either on-grade or in structures below grade.

Policy Two: Avoid extreme contrast in color shape and other characteristics which will cause new buildings to stand out in excess of their public importance.

The campus currently, is visually separated into a "front half" which is identified by a series of brick clad rectangular buildings set behind a brick and wrought iron fence. The "rear half," containing the main hospital building, is defined by prominently articulated concrete structures. Both halves are visually distinguished from the surrounding neighborhood, but form in total the image of the hospital campus. It is anticipated that any future development on the campus should be sympathetic to the existing visual order in selection of materials and articulation of facades.

Policy Three: Promote efforts to achieve high quality design for buildings to be constructed at prominent locations.

In an effort to promote high quality design on the campus, the Hospital has, and will continue to review design plans with the community and planning department. It is committed to providing responsive and high quality architecture as befitting a civic institution.

Policy Four: Promote buildings forms that will respect the integrity of open spaces and other public areas.

- **Mental Health Skilled Nursing Center** creates a major park-like space within its building form for use by its residents. The Center is also planned so that it does not infringe on the existing, unused park land southeast of the site.

- **AIDS Research Center** is constructed above an existing building to avoid encroaching an existing space, and is designed so as not to affect that open space.

- **Parking Garage** is proposed in a location which currently houses a P.U.C. facility, in order to also avoid open space encroachment. All the garage design alternatives on the suggested site provide for some open space setbacks from the property line.

Policy Five: Relate the height of buildings to important attributes of the city pattern and to the height and character of existing development.

See the response to Policy One.

CONFORMITY WITH CITY'S COMPREHENSIVE PLAN *DEVELOPMENT PLANS*

Policy Six: Relate the bulk of buildings to the prevailing scale of development to avoid an overwhelming or dominating construction.

The Urban Design Plan establishes maximum plan and diagonal plan dimensions for new construction above the prevailing height of development in each area of the city. The Hospital campus has a bulk zone of 105E. In this zone the maximum building height is 105 feet, maximum plan and diagonal dimensions are in effect above 65 feet.

The existing structures on campus exceed the bulk limitation but not the height limitations. All currently projected (short range)projects conform to these requirements and are below 65 feet in height, except for the AIDS Research Center. The AIDS Research Center, located in proximity to the Main Hospital Building, has received a negative declaration of environmental impact.

SAN FRANCISCO GENERAL HOSPITAL MEDICAL CENTER

MASTER PLAN UPDATE

TRANSPORTATION STUDY

November, 1987

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INTRODUCTION

This report presents the results of transportation studies which have been conducted in support of the Master Plan for the San Francisco General Hospital Medical Center (SFGHMC).

This report is divided into five sections representing different elements of the analysis:

Section 1: Population Data

Section 2: Parking Survey and Projected Needs

Section 3: Traffic Impacts

Section 4: Transit Impacts

Section 5: On-Site Circulation

Attached to this report are three appendices which provide detailed tabulations of survey data which was collected during the course of the study.

SECTION 1
POPULATION DATA

EMPLOYEES

Employee statistics were developed from aggregate data collected from supervisors as well as a survey distributed to all employees. About 1,000 responses were obtained, which represents about 25 percent of the total number of persons employed.

The survey included detailed questions regarding days and shifts worked, which was used to stratify the responses into a subset "Weekday Daytime" database representing the 8:00 AM - 3:30 PM weekday period during which parking problems are most severe.[1]

This section documents the information obtained. The employee survey form and complete tabulation of results are presented in Appendix C.

Daily Population

SFGHMC employs approximately 4000 persons, which includes 1200 employees of the University of California, San Francisco and 2700 employees of the City and County of San Francisco, according to current payroll figures. (The total figure includes an allowance for grant programs which have separate payrolls.)

About 70 percent of SFGHMC employees work one of six defined shifts listed in Table 1.1 below, based upon a survey of supervisors. The remaining 30 percent work odd shifts and do not necessarily work 40 hour weeks, according to employee surveys.

[1]The general tabulations were prepared from the entire database, while specific factors used in the daytime analysis were culled from the specialized database.

TABLE 1.1
WORK SHIFTS AND PROPORTION OF EMPLOYEES WORKING DEFINED WORK HOURS
CCSF AND UC STAFFS

Standard Work Day:[1]	Percent
8:00 AM - 5:00 PM	45.0
Nursing Shifts:	
7:00 AM - 3:30 PM	27.7
3:00 PM - 11:30 PM	13.5
11:00 PM - 7:30 AM	8.4
12 Hour Shifts:	
7:00 AM - 7:00 PM	2.8
7:00 PM - 7:00 AM	2.6

Notes:
1. A small proportion work 7:30 AM - 5:30 PM.

Source: Supervisor survey.

Workers on the 8:00 AM - 5:00 PM day are heavily concentrated in weekdays, while the nursing and 12 hour shifts continue all days of the week, with slightly lower staff levels weekends and holidays. Therefore the weekday daily population cannot be directly estimated from the percentages shown in Table 1.1.

Table 1.2 presents an estimate of the variation of employment levels during a typical weekday, based upon surveys of employees and supervisors, adjusted to take into account 24 hour, 7 day a week operation of the facility.

TABLE 1.2
ESTIMATED EMPLOYEE POPULATION
TYPICAL WEEKDAY

Time Period	Number	Percent of Daily Total
7:00 AM - 7:30 AM Morning Shift Change	**1070**	**33 %**
7:30 AM - 8:00 AM Early Morning	840	25 %
8:00 AM - 3:00 PM Midday Daytime	2610	80 %
3:00 PM - 3:30 PM Afternoon Shift Change	**2975**	**91 %**
3:30 PM - 5:00 PM Afternoon Daytime	2215	67 %
5:00 PM - 11:00 PM Evening	440	13 %
11:00 PM - 11:30 PM Evening Shift Change	**665**	**20 %**
11:30 PM - 7:00 AM Overnight	300	9 %

Notes:
1. Shift overlap times indicated in boldface.

Source: DKS Associates, derived from data furnished by SFGHMC.

This table indicates that the peak daytime population, exclusive of the afternoon shift change, is about 2,600 persons, which represents about 80 percent of the daily population total of about 3,300 persons. During the afternoon shift change, an additional 365 persons are present. In reality, this number is never achieved since some of the persons arriving for the afternoon shift by car circulate the facility waiting for morning shift persons to unpark.

It should be pointed out that, according to responses to the employee survey, about ten percent are on rotating shifts which change each week.

Job Classification

Employees were asked to categorize the type of work which was performed. Table 1.3 lists the top five categories. (See Appendix C for detailed results.)

TABLE 1.3
EMPLOYEE JOB CLASSIFICATIONS
MAJOR CATEGORIES

Category	Percent
Office Worker	25 %
Nurse	18 %
Technician	15 %
Administrator	12 %
Doctor	12 %
Professor/Researcher	5 %
Service Staff[1]	5 %
Other	8 %

Notes:
1. Including Housekeeping, Dietary, Security, Maintenance, etc.

Source: Employee survey.

Employee Residence Locations

Most employees are from San Francisco, with the second largest groups from the Peninsula and East Bay, as shown in Table 1.4. Figure 1-1 depicts the breakdown of employee residences by zip code within San Francisco, and Table 1.5 indicates the distribution of San Francisco workers by zip code and quadrant as defined by the San Francisco Department of City Planning. (A tabulation of all employee zip codes is included in Appendix C.)

TABLE 1.4
EMPLOYEE RESIDENCE LOCATIONS
ALL EMPLOYEES

Location	Percent
San Francisco	60 %
Peninsula	17 %
East Bay	17 %
North Bay	5 %
South Bay	1 %

Source: Employee survey.

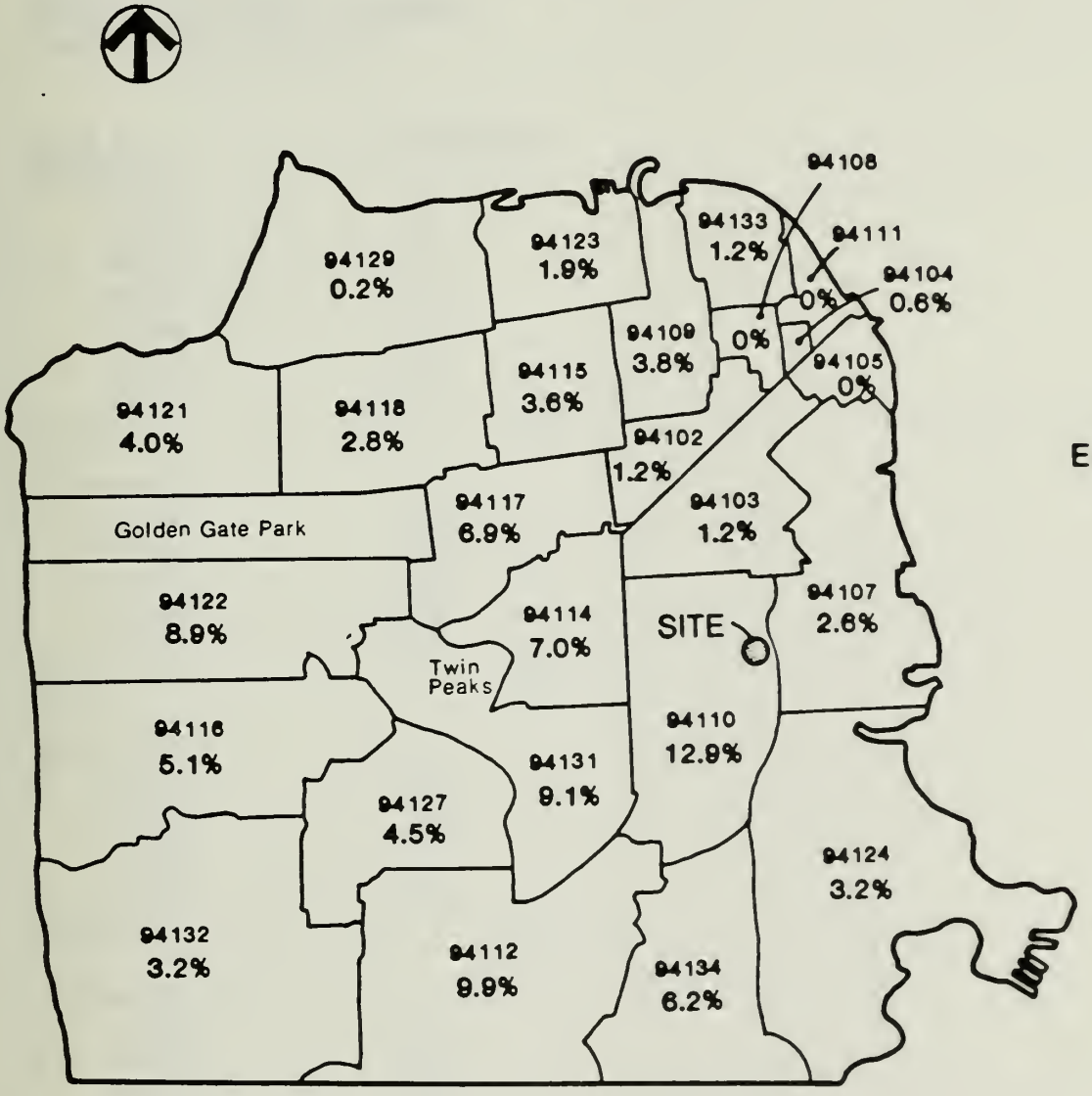

Figure 1-1
Employee Residence Locations

TABLE 1.5
EMPLOYEE RESIDENCE LOCATIONS
SAN FRANCISCO EMPLOYEES

Location	Percentages	
Northeast:		
94102	1.2	
94103	1.2	
94104	0.6	
94105	0.0	
94109	3.8	
94111	0.0	
94133	1.2	
Subtotal:		8.0
Northwest:		
94115	3.6	
94118	2.8	
94121	4.0	
94123	1.9	
94129	0.2	
Subtotal:		12.5
Southeast:		
94107	2.6	
94110	12.9	
94112	9.9	
94124	3.2	
94134	6.2	
Subtotal:		34.8
Southwest:		
94114	7.0	
94116	5.1	
94117	6.9	
94122	8.9	
94127	4.5	
94131	9.1	
94132	3.2	
Subtotal:		44.7

Source: Employee survey.

Mode of Arrival

Table 1.6 indicates the principal mode of arrival by employee classification. A small portion of the MUNI riders transferred from other transit systems, including BART, AC Transit and a few Golden Gate Transit riders. Most BART passengers walk to the hospital from the 24th Street station, but a portion use MUNI.

TABLE 1.6
MODE OF ARRIVAL
BY EMPLOYEE CLASS

	Drive Alone	Car-pool[1]	Van-pool[2]	MUNI[3]	BART	SamTrans	Other[4]
Office Worker	60.3	7.7	5.3	15.4	0.4	2.8	8.1
Nurse	80.0	6.9	1.7	5.1	0.6	0.0	5.7
Technician	66.5	11.6	4.1	9.6	4.1	0.7	3.4
Administrator	80.6	2.5	3.4	7.6	1.7	0.0	4.2
Doctor	84.0	4.2	3.4	2.5	1.7	0.0	4.2
Professor/Researcher	80.4	3.9	5.9	3.9	0.0	0.0	5.9
Service Staff	69.5	2.0	0.0	16.3	0.0	0.0	12.2
Other	70.1	5.3	7.0	12.3	0.0	0.0	5.3
All Employees	72.1	6.4	3.8	9.6	1.9	0.2	5.9

Notes:
1. Average occupancy 2.97.
2. Including UCSF Shuttle Bus.
3. Including transfers from BART, AC and Golden Gate Transit.
4. Including walk, bike, motorcycle, drop-off's.

Source: Employee survey.

Employee Parking Data

The employee survey collected additional data from employees who drive to the hospital:

a. Where they usually park;
b. The number of days the car is used during the workday;
c. The total monthly cost for parking, including tickets.

Sixty percent of employee parkers indicated they typically (three days or more) park on-street versus forty percent who usually park off-street at the hospital.

Of those who park, about 50 percent use their car an average of 1.6 days a week.

Since there are no pay garages or lots in the vicinity of the hospital, many employees report "ten dollar days" due to parking tickets received when no legal spots were available within reasonable walking distance. Therefore, the employee survey asked what costs, if any were incurred by parkers. About two-thirds of the employee parkers reported no monthly parking cost. The remaining third indicated paying an average of 8 dollars per month, with five percent reporting costs exceeding 30 dollars per month.

VISITORS

Purpose of Visit

Table 1.7 indicates the purpose of visit for daily and daytime (9:00 AM to 5:00 PM) visitors. SFGHMC is visited by a wide range of persons. In addition to inpatient visitors, outpatients and business visitors, significant numbers of persons travel to the hospital to use the pharmacies and emergency room.

A number of the "other" responses specified "bring friend/relative to the hospital" as the purpose for the trip. However, it is difficult to accurately estimate the numerical amount since completed surveys were not necessarily obtained from friends or relatives who accompanied patients to the hospital.

TABLE 1.7
PURPOSE OF VISIT
TYPICAL WEEKDAY

Purpose of Visit	Percentages Daily[1]	Daytime[2]
Outpatients	40	61
Emergency Room	17	11
Visit Inpatient	15	9
Use Pharmacy	8	6
Business Visit	7	5
Other	13	8

Notes:
1. Estimated from hospital records and visitor survey.
2. From visitor survey.

Daily Population

A daily visitor population estimate has been prepared by comparing the results of a survey of about 350 hospital visitors with historical averages of outpatient and emergency room visits. The results of this analysis are presented in Table 1.8, which indicates an estimated total daily visitation of some 3000 persons. This population total is estimated for the "design" day, a day which is above average and about 85 percent of a peak day.

The "other" category includes an estimated 300 visitors who arrive with outpatients and emergency room patients. It should be noted that a certain percentage of hospital visitors are accompanied by minors. Some minors are patients, in other instances they are simply brought along with adults. The visitor population estimate does not include any allowance for minors accompanying adults except for those minors which are coming for treatment.

TABLE 1.8
ESTIMATED VISITOR POPULATION
DESIGN WEEKDAY

Purpose of Visit	Daily	Daytime[1]
Outpatients	1,200	1,000
Emergency Room[2]	500	200
Visit Inpatient	450	160
Use Pharmacy	250	100
Business Visit	200	90
Other	400	340
Total Visitors	3,000	2,100

Notes:
1. 9:00 AM - 5:00 PM.
2. Includes children's emergency with guardians.

Not all of the visitor population is present at any one time. Using the distribution of visitor durations obtained from the visitor survey and taking into account observed peaking of parking demand levels, it is estimated that the peak visitor accumulation during the day is 850 persons, which is 40 percent of the "daytime" amount, or 25 percent of the "daily" amount. This proportion is larger than that which would be present at a typical medical office building, because visitors to SFGHMC have significantly longer durations on-site.

Duration of Visit

Visitors were asked to estimate the amount of time spent on-site. The distribution of durations indicted in the survey responses is shown in Table 1.9. It should be noted that the total amount of time visitors are on site would include parking or transit access time, which could add up to one half hour on a round trip basis. Therefore, for parking planning, twenty minutes to one-half hour should be added to these durations.

TABLE 1.9
DURATION OF VISIT
EXPECTED LENGTH

Amount of Time	Percent
One Half Hour	18
About One Hour	31
Two to Three Hours	38
Four or More Hours	13

Source: Visitor survey.

Visitor Origins

Table 1.10 indicates the origin of visitor trips to the hospital. Nearly 95 percent of all visitors came from within the City of San Francisco. Visitor origins were concentrated within neighborhoods surrounding the hospital -- over 50 percent of visitors come from the Mission, Noe Valley/Twin Peaks/Haight/Castro, Bayview/Hunters Point and Potrero Hill neighborhoods.

TABLE 1.10
VISITOR ORIGINS

Location	Percent
Mission District	26
Twin Peaks/Noe Valley/Haight/Castro	13
Bayview/Hunters Point	9
Downtown/North Beach/Telegraph, Russian or Nob Hills	8
Western Addition/Fillmore	7
Tenderloin	6
South of Market	6
Potrero Hill	4
Bernal Heights/Outer Mission	4
Oceanview/Merced/Ingleside (OMI)	3
Other San Francisco Neighborhoods	8
Beyond San Francisco	6

Source: Visitor survey.

Mode of Arrival

Nearly all visitors used five principal modes of transportation to access SFGHMC, as shown in Table 1.11. This table indicates that less than one-half of all visitors arrive by private auto. In addition, 8 percent of visitors walked to the hospital.

TABLE 1.11
MODE OF ARRIVAL
VISITORS

Travel Mode	Percent
Private Car	45
MUNI Bus[1]	35
Walked All the Way	8
Van or Minibus	5
Taxi	4
Other	3

Notes:
1. Including transferees from other transit systems.

Source: Visitor survey.

Parking Data

Some additional data was collected regarding visitors who arrived by car, in order to identify the proportion which parked and parking locations. Of those who came by car, 26 percent were dropped off and the car was not parked. Of the remaining 74 percent who parked, 58 percent parked on-street and 42 percent parked in a lot at the hospital, which nearly matches the response of employee parkers.

Finally, visitors were asked how many blocks away from the hospital they parked. The responses are summarized in Table 1.12. In interpreting these responses, it must be remembered that the periphery of the hospital is one block from the principal sites visited. The survey indicates that 85 percent of the visitors park within 4 blocks of the hospital. Since most visitors arrive after the employees, they would be expected to be parked farther away, at least in the morning. Later in the day, after some employees have used their cars for travel during work hours, the distribution of employee parkers would tend to approach that of the visitors.

TABLE 1.12
VISITOR PARKING DISTANCES
BLOCKS FROM HOSPITAL

Distance	Percent
1 Block	16
2 Blocks	32
3 Blocks	23
4 Blocks	14
5 Blocks	10
Beyond	5

Source: Visitor survey.

SECTION 2
PARKING SURVEY AND NEEDS

A comprehensive parking survey was conducted of the SFGHMC parking lots and on-street stalls within four blocks of the hospital on Thursday, August 20, 1987. Supplemental follow-up surveys were conducted the following Thursday. Stalls were surveyed for occupancy from 5:30 AM through 5:30 PM. License plates of a sampling of vehicles from each lot and block face were also recorded to establish turnover statistics.

The results of the parking survey are reported on a lot-by-lot and block-by-block basis in Appendix A.

HOSPITAL LOTS

Stall Inventory

Figure 2-1 indicates the location of defined parking areas on the hospital site. There are 584 marked off-street stalls.[2] Refer to Appendix A for specific lot designations, stall counts and restrictions for each of the 18 areas counted.

Occupancy

Occupancies are indicated in Figure 2-1 by shading. The highest quantity of surveyed vehicles parked on-site was 766 which occurred at 12:30 PM. The 182 vehicles illegally parked outside of marked stalls represent a total accumulation of 131 percent of the base capacity. Additional vehicles illegally parked in stalls for which they were not eligible (such as employees parking in the visitor lot on 23rd Street) were surely present, but the survey was not designed to identify these cars.

The lots were 100 percent full by 8:30 AM and remained so until after the afternoon shift change at 3:30 PM. During the afternoon shift change, many employees park in tandem through prior arrangement with morning shift workers; others idle in the street and lots to await the departure of a morning shift person or visitor.

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[2]As many as 142 additional vehicles park illegally along the fire lane beside Potrero Avenue on a regular basis, so this zone was separately counted in the inventory and survey.

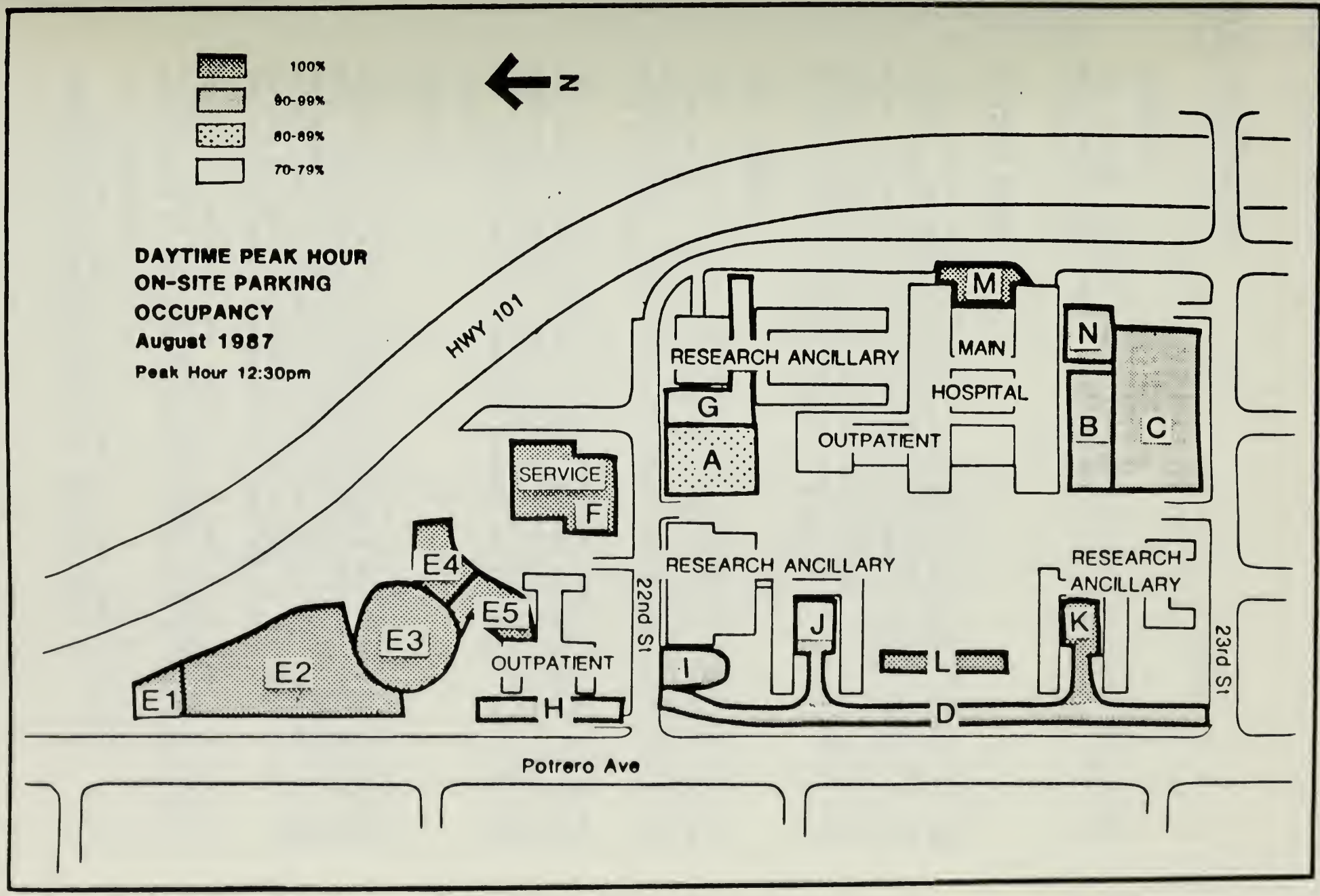

Figure 2-1
On-Site Occupancy

Duration

The average duration of the Visitor Lot was 2.3 hours, which agrees with the 2 hour limit. For the entire facility, the on-site lots averaged 4.9 hours.

ON-STREET PARKING

The on-street survey included all spaces within a four-block radius of SFGHMC. The bounding streets were 20th to the north, De Haro to the east, 25th to the south and Bryant to the west.[3] Each block face was separately surveyed for occupancy and turnover (refer to Appendix A for detailed identification of block faces and survey data). For reporting purposes, data was aggregated by neighborhood: Potrero Hill/East Mission, including blocks east and west of US 101; and by radius from the hospital: 1 block/2 blocks/3 and 4 blocks.

Stall Inventory

Within the 40 block area surveyed, 2200 legal on-street stalls were inventoried, 700 on Potrero Hill and 1500 in the East Mission neighborhood. In terms of distance, there were 300 on-street stalls within 1 block, 600 within 1 to 2 blocks, and an additional 1300 in the 2 to 4 block range.

Various parking controls, including parking meters along 24th Street and various restrictions for short periods of each week for street cleaning are posted. The survey was conducted on Thursday, when the fewest parking restrictions within the survey area pertain, therefore the highest number of hospital parkers within the survey zone were expected.

Occupancy

Since essentially no hospital parking occurs overnight, cars present on-street at the 5:30 AM survey period were essentially all associated with the surrounding residential neighborhoods. At this time, approximately 70 percent of all stalls were occupied throughout the survey area. A large proportion of the stalls turn over early in the morning as residents leave for work, so that by mid morning, most of the on-street stalls are occupied by hospital parkers.

Figure 2-2 indicates the occupancy of each block face surveyed at 2:45 PM. This time represents the highest occupancy level surveyed, exclusive of a brief peaking during the 3:00 to 3:30 PM shift change.

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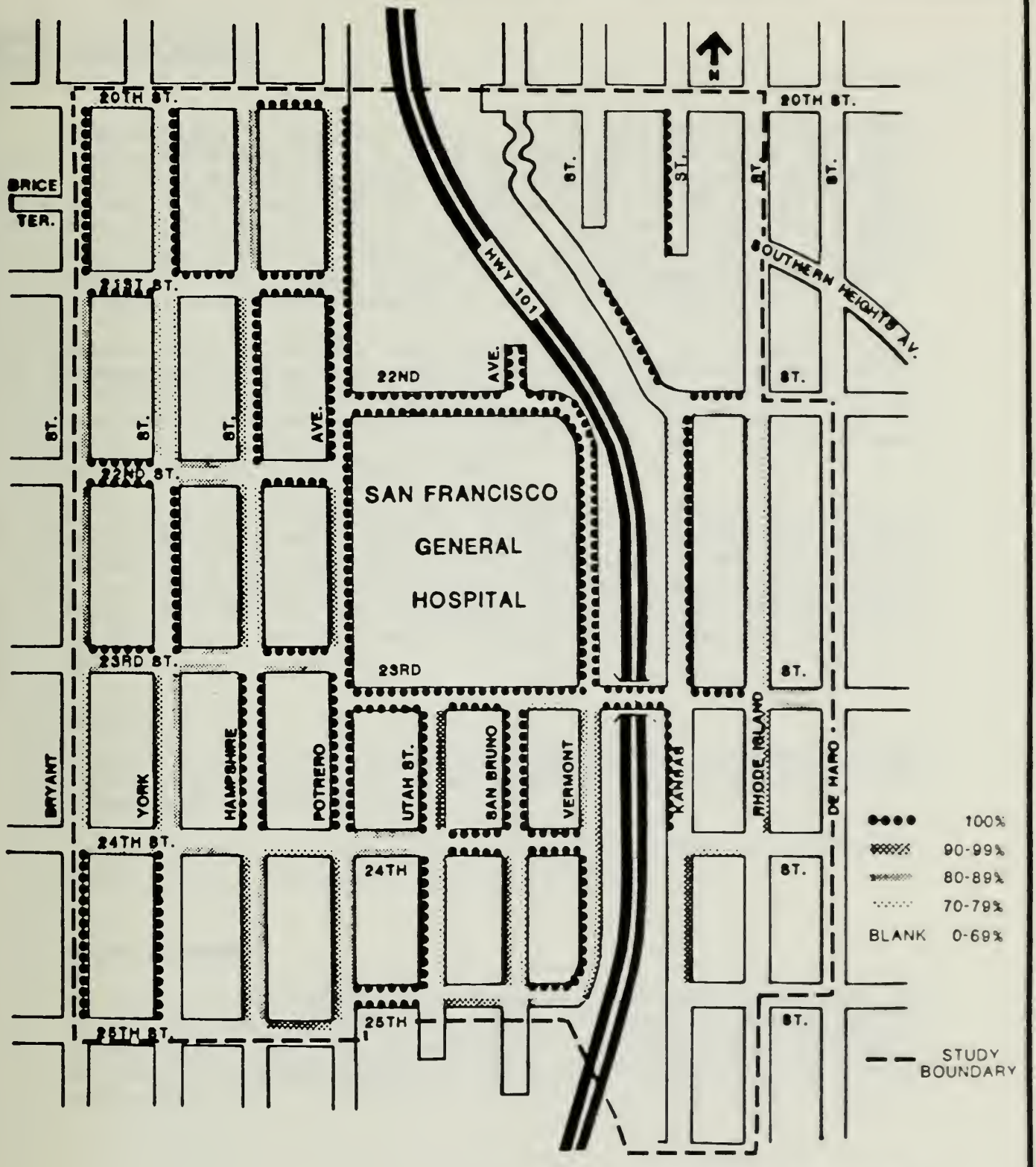
[3]The far side of the street was excluded from blocks on the periphery at the extreme corners of the study area.



DAYTIME PEAK HOUR PARKING OCCUPANCY
August 1987
Peak Hour 2:45 pm

Figure 2-2
On-Street Occupancy

East Mission: Occupancy levels in the East Mission neighborhood climbed to 80 percent by 7:30 AM and remained at or above this level until 4:30 PM (with individual blocks reaching 100 percent occupancy). Between 1:30 PM and 3:30 PM, occupancy levels of 90 percent or more throughout the area were recorded. This means that for a block containing 20 stalls, there would be 2 available spaces. (From a practical point of view, parking is "full" when the occupancy exceeds 90 percent due to the difficulty in locating available spaces.)

Potrero Hill: Although individual block faces in the Potrero Hill neighborhood were severely impacted by hospital parking, overall levels of demand were lower in this area. The overall occupancy level in portions of this neighborhood included in the study boundary was 65 percent or more occupied from 6:30 AM to 4:30 PM and 70 percent or more occupied from 9:30 AM through 1:30 PM.

By Distance: Occupancies by distance from the hospital show the pattern of impact most clearly -- on-street stalls within 1 block were 90 percent or more occupied from 7:30 AM through 3:30 PM, stalls in the 1 to 2 block range were 90 percent or more occupied from 8:30 AM through 3:00 PM[4], whereas the overall occupancy in the remaining stalls in the 2 to 4 block range was 70 percent or more occupied from 8:30 to 5:30 PM.

Duration

Average parking duration of the East Mission neighborhood was approximately 3.8 hours, while the average duration in the Potrero Hill neighborhood was 5.4 hours.

Average parking duration within one block of SFGHMC was 5.4 hours; beyond 1 block, the duration averaged 4.0 hours.

HOSPITAL DEMAND

In order to delineate the location and magnitude of employee and visitor parking associated with SFGHMC, a turnover study of the on-street parking data was accomplished. This study was independently verified by a demand projection based upon the employee and visitor statistics.

[4]A brief period of higher usage occurred during the afternoon shift change at 3:00 to 3:30 PM, but this peaking of demand was too short in duration to appear in the survey data.

Turnover Study

It should first be pointed out that there should be no significant levels of hospital parking beyond the survey boundary: The visitor survey responses indicate 85 percent of the visitors park within 4 blocks and 95 percent within 5 blocks. Taking into consideration the fact that most persons would need to travel 1 block to reach the periphery of the campus, as well as the fact that blocks toward the corners of the study area exceed four blocks from most buildings, few hospital visitors would park beyond the survey area. Employees, most of whom arrive before visitors, would be expected to be parked closer to the hospital in the morning. Those who move their vehicles during the day would be distributed more in accordance with the visitor distribution during the afternoon.

The maximum level of hospital usage of on-street stalls was identified through analysis of license plate data: For each on-street stall where license plates were recorded, vehicles which remained parked throughout the length of the survey (5:30 AM through 5:30 PM) were counted as non-hospital vehicles.[5] Of the remaining stalls, the peak occupancy during mid-day (8:30 AM through 3:30 PM) was tabulated as the maximum potential hospital demand.

The result of this tabulation indicated a maximum possible 1365 hospital vehicles were parked within the study area. Based upon field surveys, reduction factors of 5 percent, 15 percent and 25 percent for the 1 block, 2 block and 4 block radii, respectively, were applied to the gross stall count to reflect the decreasing impact of the hospital and competition from other uses by distance. This analysis indicates there were about 1190 hospital-related parkers on-street within the study area, 240 within the first block, 350 additional within the next block, and 600 more within the next two blocks.

Demand Projection

Applying the results of the employee and visitor surveys to the population data, a separate estimate of hospital-related on-street parking demand was prepared.

Employee Demand: The proportion of the total payroll assigned during the daytime period (exclusive of the afternoon shift change) is about 2,600 employees. Allowing for sick days, vacation and holidays would reduce this by about 10 percent on a typical day. A further 5 percent reduction should be taken to reflect employee car usage during the day, which would result in a total of 2230 employees on-site during mid-day. Applying the mode of arrival percentages and vehicle occupancy factors

[5]Few vehicles associated with the hospital which were present on-street at 5:30 AM would be expected to remain throughout the day.

for drive-alones, carpoolers and vanpoolers, about 1660 total employee vehicles would result.

Visitor Demand: About 850 visitors would be expected mid-day on a "design day". Applying the 45 percent "by car" arrival factor, the 74 percent "parked" factor and an auto occupancy factor of 1.15[6], about 250 vehicles would result.

Total Demand: The two components of demand total about 1900 vehicles. Since about 740 are parked on-site, the remaining 1170 are estimated to park on-street. This compares favorably with the 1190 found by survey. An additional check can be accomplished by verifying on-site and off-site amounts: Forty percent of all vehicles (employee and visitor) were parked on-site, based upon the employee and visitor surveys. With a total hospital parking demand of 1900 vehicles, the on-site demand would be 760 vehicles, which agrees with the peak surveyed demand of 766 vehicles in the hospital lots.

MASTER PLAN PARKING NEEDS

In this section, the Master Plan parking needs are evaluated, initially with no change in the present mode of arrival. The potential impact of a neighborhood permit parking program is explored, in terms of its relationship to the size of a potential garage facility. Finally, estimates of reduced parking need associated with a "low" and "high" range of Transportation Systems Management (TSM) attainment are presented, reflecting the savings in parking which could be achieved by encouraging the use of carpools, vanpools and transit by employees.

Backlog Parking Need

The backlog parking need includes those spaces which are necessary today to eliminate illegal and unsafe parking from parking areas on-site, exclusive of any other parking needs. A total of 250 stalls are required for the following reasons:

140 - eliminate parking from fire lane along Potrero Avenue
50 - eliminate cars not parked in marked stalls in lots
60 - eliminate employee parking in wrong stalls

Approximately 140 vehicles are illegally parked in the fire lane along Potrero Avenue. These vehicles represent an impediment to providing

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[6]This figure is the average number of adult occupants per visitor vehicle, from a survey of arriving vehicles at the visitor lot.

adequate fire response to the older structures along Potrero and should be eliminated.

Occupancy surveys of the lots indicated a peak accumulation of 50 vehicles in excess of the marked stalls. Some of these vehicles are also blocking access to structures for fire protection (notably those behind Building 80/90). Others represent an inconvenience to proper and accident-free use of the lots.

Finally, it is conservatively estimated that about 10 percent of the employees park illegally in the wrong lot. Violations are known to occur in the visitor lot along 23rd Street.

In order to eliminate illegal parking, the 250 additional stalls would need to be provided and enforcement of parking would need to be increased as well.

Master Plan Growth

Additional parking will be required to accommodate increases in demand as well as reductions in on-site parking which would occur as a result of new facilities contained in the Master Plan. These stalls would be required to prevent a worsening of off-site parking impacts as the Master Plan is develóped. Two new facilities in the Master Plan would increase the parking needs, the Mental Health Skilled Nursing Center and the MRI Trailer.

Mental Health Skilled Nursing Center: Added parking demand associated with the Mental Health Skilled Nursing Center demand would be 121 stalls. However, since the proposed site for the facility is on the existing E Lot, a net 144 existing stalls would be lost, total need is 265 additional stalls.

The demand estimate of 121 stalls is based upon a projected daily employee population of 176 persons. Using data from the SFGHMC shift analysis, it is estimated that 80 percent of these persons would be present during a typical weekday day. Applying the 72 percent "drive alone" and 6.4 percent "carpool" mode of arrival factors (with 3 persons per carpool), a total of 105 stalls would be needed (3 for carpools).

In addition to the employee demand, a visitor demand level of 15 stalls is projected, based upon the existing ratio of visitor demand to employee demand.

The parking loss from the E Lot would be 220 marked stalls, 122 under the buildings and 98 from adjacent lots beside Building 80/90 and the Steam Plant. However, 76 replacement stalls would be provided in a new surface lot, resulting in a net parking loss of 144 stalls.

MRI Trailer: An MRI trailer will be placed on the A Lot next to the Outpatient Clinic wing of the main hospital. Based upon a projected staff of 5 employees, 4 stalls would be required using the demand factors developed from the existing hospital.

In addition, 8 stalls would be lost from the A Lot. Some of these would be under the trailer itself and others would be lost in order to maintain appropriate distance between the trailer and parked cars.[7] Thus, a total net need of 12 stalls would be generated.

Elimination of Neighborhood Parking Impacts

Elimination of parking from neighborhoods surrounding SFGHMC would require development of additional off-street parking. Approximately 1150 vehicles associated with the hospital are parked on-street. About 150 of these are estimated to be visitor vehicles and about 1,000 are employee vehicles.

Visitor Parkers: In theory, the visitor parkers could be accommodated along roadways immediately surrounding the hospital buildings where there is little residential parking demand. (Key locations are head-in stalls along Vermont, and parallel stalls along Potrero.) However, if these stalls were posted for short-term use only, the net effect would be displacement of employee vehicles into residential neighborhoods. (Since employees arrive before visitors, it is assumed that most of these stalls are used by employees.)

If parking in the garage were provided for all visitors, an estimated 250 stalls would be required. (This scenario presumes the existing visitor lot would be reserved for carpools and doctor's parking during the daytime when visitors would be parked in the garage.)

Employee Parkers: The estimated total of on-street employee parkers is 1,000, excepting a brief period during the afternoon shift change when an additional 250 vehicles are parked.

If a residential permit program were instituted in the two-block radius surrounding the hospital within which the most severe impacts occur, approximately 250 off-street stalls would be required. This number presumes that stalls along 22nd and 23rd Streets between Potrero and Vermont and Potrero and Vermont Streets between 22nd and 23rd which are not adjacent to residences would remain available to SFGHMC parkers. Thus, of the estimated 500 hospital-related parkers within the first two blocks, it is assumed that 250 would remain on-street at the indicated locations. (The needed off-street stalls could be reduced to

[7]For technical reasons, an MRI facility must be protected from radio frequency interference and large metallic masses.

150 if the east side of Vermont Street between 23rd and 25th, along the freeway, remained available to hospital parkers.)

Elimination of all employee parkers from on-street stalls, such as might occur with an areawide permit program, would require provision of an additional 500 off-street stalls to accommodate the remaining 500 hospital parkers, all of which are parked within the residential neighborhoods.

SUMMARY

Table 2.1 summarizes the cumulative level of off-street parking needed to achieve each of the levels of need described in this section. In terms of timing, the "Backlog" and "Master Plan" parking need have been aggregated into a Phase I need, since both would need to be satisfied upon development of the Master Plan. Phase II, which might occur over a longer term, represents the increased levels of need associated with elimination of neighborhood impacts.

TABLE 2.1
SUMMARY OF PARKING NEED

Phase and Specific Need	Additional Stalls Net	Total
PHASE I:		
Backlog Parking Need (Illegal On-Site Parkers)	250	250
Mental Health Skilled Nursing Center	265	515
MRI Trailer	12	527
PHASE II:		
Park Visitors in Garage	250	777
Eliminate Employee Impacts (2 block radius)	250	1027[1]
Eliminate Employee Impacts (4 block radius)	500	1527[2]

Notes:
1. Reduces to 150 net, 927 total stalls with east side of Vermont between 23rd and 25th were available for long-term employee parking.
1. Reduces to 500 net,1427 total stalls with east side of Vermont between 23rd and 25th were available for long-term employee parking.

IMPACT OF TSM ON PARKING NEEDS

Imposition of a Transportation Systems Management (TSM) program to reduce the usage of single-occupant automobiles for access to SFGHMC could significantly reduce the amount of additional parking need in the long term. To be effective, a TSM program would require positive factors, such as provision of well situated, free parking stalls for carpools and vanpools, as well as restrictive provisions, such as limitations on parking in the neighborhood and charging significant monthly amounts for on-site parking permits.

The basic provisions of a TSM program for SFGHMC were previously defined in a 1979 plan prepared by De Leuw, Cather & Company and others;[8] this plan remains applicable today.

It would be difficult to shift additional visitors to transit and carpools, given the small percentage who arrive by car and park. Therefore, projected reductions in parking demand should be based upon reducing the number of employees in the 7:00 am - 3:30 pm and 8:00 am-5:00 pm, weekday shifts.

A moderately effective TSM program could reduce shift about 12 percent of single occupant commuters to transit and carpools, while a highly effective program could potentially shift 24 percent away from driving alone to work. This latter level could only be achieved with severe cost and supply restrictions on parking near the hospital as well as transit incentives such as faster, more frequent service and subsidies.

These figures were developed by examining the potential market share of daytime employees which could be garnered by transit and ridesharing. The prime objective would be increasing MUNI ridership amongst San Francisco employees -- raising the participation level in transit usage by 25 percent (from 10 percent existing to a long term objective of 35 percent) would reduce parking need by about 390 stalls. An increase in 20 percent of ridesharing participation amongst East Bay and Peninsula employees would reduce parking requirements by an additional 105 stalls over the long term, with an average vehicle occupancy of 2.5 persons. An additional 65 stalls could be saved by increasing participation in transit usage from the East Bay by 15 percent. Finally, generating a 5 percent participation increase amongst San Francisco residents in 2-person carpools and a 5 percent increase in transit or vanpool participation from amongst remaining groups could reduce demand by another 80 stalls, for a total savings of 640 stalls with a "high" level of TSM attainment. An intermediate level program could accomplish about one half of these goals.

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[8] Transportation Systems Management Plan for San Francisco General Hospital, October, 1979.

Table 2.2 indicates the reduction in additional off-street parking which would result from the above-described shifts to transit and ridesharing for the intermediate and maximum levels of TSM attainment.[9] This table shows that a moderately successful TSM program could allow development of the Master Plan with 300 additional garage stalls without exacerbating the existing impact to the neighborhood (although existing levels of impact would remain.) Elimination of neighborhood parking impacts would require development of 500 to 1200 garage stalls, depending upon the extent to which hospital employee parking is restricted in the neighborhood and level of TSM attainment -- with a moderately restrictive permit program and moderate level of TSM participation, a 760 stall garage would be required. With a high level of TSM participation and blanket prohibition of employee parking in the neighborhoods, a 900 car garage would be required.

TABLE 2.2
EFFECTIVENESS OF TSM PROGRAM
REDUCTIONS IN PARKING AND RESULTING OFF-STREET NEEDS

	Level of TSM Participation			
	Intermediate		Maximum	
Condition	Savings	Need	Savings	Need
EXISTING CONDITION:	170	0	340	0
PHASE I PARKING:				
Backlog Need	190	60	380	0
Master Plan Need	220	300	440	90
PHASE II PARKING:				
1 to 2 Block Permit Program	270	760	540	500
Areawide Permit Program	320	1200	640	900

[9] If spaces on the east side of Vermont street between 23rd and 25th were excluded from the permit area about 100 fewer garage stalls would be required.

SECTION 3
TRAFFIC IMPACTS

The following section addresses the traffic impacts of the proposed Master Plan, which includes the additional traffic associated with the Mental Health Skilled Nursing Center and MRI trailer as well as traffic re-distribution associated with development of the proposed parking structure. The Mental Health Skilled Nursing Center would add approximately 176 persons to the daily employee population, while the MRI trailer would add a daily staff of 5 employees. The analysis of traffic impacts was conducted for both a 600 and a 1,200 car garage.

EXISTING CONDITIONS

Roadway Network

Regional access is provided to San Francisco General Hospital by US 101 via the Army Street interchange. Potrero Avenue functions as the primary north-south arterial serving the hospital. Local roadways that serve as key access points to the hospital include 22nd Street, 23rd Street and Vermont Streets.

Potrero Avenue is a north-south arterial between the Interstate 80/ US 101 and US 101/Army Street interchanges. There are three through traffic lanes in each direction on Potrero Avenue in the vicinity of the hospital. In recent years, this roadway has become a peak hour "by-pass" to the congested section of US 101 in the area, resulting in large increases in local traffic volumes. Since the congestion on US 101 has been present for a number of years, while additional capacity remains on Potrero Avenue, the growth in traffic volumes is not expected to continue at the same rate.

Vermont Street is a north-south roadway that serves as a major access point to the hospital site in addition to providing a significant amount of parking. The service entrance for the hospital is on Vermont mid-block between 22nd and 23rd Streets.

23rd Street is an east-west roadway which borders the south side of the hospital campus. An overpass as US 101 provides a connection between the Potrero Hill and Mission neighborhoods. This roadway has one travel lane in each direction and has limited on street parking. The main entrance to the hospital is located off 23rd Street.

22nd Street is a local east-west roadway that serves as a primary access to the hospital from Potrero Avenue. This roadway provides one travel lane in each direction and a significant level of on-street parking.

24th Street is an east-west commercial street located one block south of the main hospital campus. This street would be used as an access route to Potrero Avenue from the employee entrance to the garage, which would be located on Utah near 24th Street.

Existing Traffic Conditions

The critical capacity constraints in the study area roadway network are the major signalized intersections. As a result, the existing traffic operations at several area intersections were evaluated. Existing lane geometrics and PM peak period (4:00 pm to 6:00 pm) volumes are displayed in Figures 2 and 3, respectively. The existing levels of service are shown in Table 3.1. All of the intersections that were analyzed operate at level of service "B" or better during the PM peak period.

TABLE 3.1
EXISTING LEVELS OF SERVICE
PM Peak Period (4:00 - 6:00)

INTERSECTION	LEVEL OF SERVICE	V/C
Potrero/22nd (East)	B	0.65
Potrero/22nd (West)	A	0.49
Potrero/23rd	B	0.65
Potrero/24th	A	0.56

Detailed planning level of service calculations were performed for each intersection during the PM Peak period (4:00 - 6:00) with DKS' own proprietary software TRACS (TRaffic Analysis Computer Software). The unsignalized locations in the study were modeled as two-phased signalized intersections.

PROJECT-RELATED IMPACTS

The traffic impacts of the proposed projects associated with the San Francisco General Hospital Master Plan, including the Mental Health Skilled Nursing Center, the MRI Trailer and parking garage, were analyzed. The trip generation estimates, trip distributions and cumulative traffic growth which constitute the net cumulative impacts are discussed in this section.

Trip Generation

The net increase to traffic within the study area would occur as a result of the proposed Mental Health Skilled Nursing Center and the MRI Trailer only. The installation of a parking garage would result only in a redistribution of existing trips within the area.

The trip generation for the proposed projects is based on the estimated employee and visitor populations, and associated parking demands, for the Mental Health Center and the MRI trailer. Approximately 124 new employee vehicle trips, 105 outbound and 19 inbound trips, would be associated with the Mental Health Center. The MRI Trailer would generate 5 vehicle trips, 4 outbound and 1 inbound. Additionally, the development of these parcels, portions of which are presently used for parking lots, would cause a shift in existing travel patterns as vehicle trips associated with lost parking stalls would seek other parking facilities.

Two parking garage scenarios were analyzed: 1) a 600 stall garage with 250 visitor spaces and 350 employee spaces and 2) a 1200 stall garage with 250 visitor spaces and 950 employee spaces. Each of the scenarios would result in the reassignment of existing trips, as well as the addition of those trips associated with the proposed projects.

The employee parking spaces that are lost as a result of the construction of new projects and the majority of the current overload of on-site hospital parking would be accommodated by the garage. The 600 car garage was also assumed to accommodate all visitors that currently park both on the hospital site and on local streets. The garage would not accommodate any of the employees who presently park in on-street spaces. It should be noted that moving all visitors to the parking garage would allow for a redesignation of the existing visitor lot for other purposes, perhaps as employee parking reserved for carpool and vanpool use.

All visitors, those parked in both on- and off-street spaces, were assigned to the 1200 car garage. Additionally, approximately 600 employee vehicles which currently park on area streets were assumed to be accommodated by the proposed garage. This will result in a "shrinkage" of the surrounding area in which hospital associated on-street parking occurs. The reassignment of on-street parking to the

garage was performed based on the percentage of assumed hospital parkers located in each of five sections of the surrounding neighborhoods. This included the Potrero Hill neighborhood and four sections of the Mission neighborhood.

Trip Distribution and Assignment

The trip distribution was based on responses to the Employee and Visitor Surveys conducted for this study. The employee related trips were distributed in accordance to the survey responses regarding their place of residence. Visitor related trips were distributed in the same manner. The projected traffic accessing the garage was assigned to either an employee entrance, located on Utah Street, or a visitor entrance on 23rd Street.

Cumulative Traffic Growth

In addition to Master Plan growth, the traffic forecasts include traffic growth due to cumulative projects.

Only one known project would directly affect the roadways analyzed: This project is a 132 residential development in the Potrero Hill neighborhood, located on the block defined by Kansas, New Hampshire, 23rd and 24th Streets. Trip generation for this project was assumed to be 7.8 daily trips per unit. During the PM peak period, the trip rate was estimated to be 0.8 trips per unit, with 0.5 and 0.3 trips per unit inbound and outbound, respectively.

Evaluation of traffic counts on Potrero Avenue indicates a considerable amount of traffic growth has occurred over the past few years, which has paralleled the development of significant PM peak hour congestion on the northbound freeway lanes. Given the extent of existing congestion on the freeway, it is unlikely peak hour volumes on Potrero would continue to rise due to this source of traffic. In order to anticipate additional sources of traffic growth, a seven percent factor was added to all traffic volumes to account for miscellaneous traffic increases within the study area over the next five years.[10] This amount was added in addition to traffic from the known residential project.

Traffic Impacts

The background traffic growth, Master Plan traffic growth and re-distribution of traffic associated with development of a parking garage were combined to determine future traffic conditions. The impacts of the cumulative traffic growth were analyzed for both the 600 and 1200

[10]Source: City of San Francisco, Department of City Planning.

car garage scenarios. The resulting levels of service and volume-to-capacity ratios are displayed in Table 3.2.

TABLE 3.2
PROJECTED SERVICE LEVELS
PM Peak Period Level of Service and Volume/Capacity Ratio

	EXISTING		600 CAR GARAGE		1200 CAR GARAGE	
INTERSECTION	v/c	Level of Service	v/c	Level of Service	v/c	Level of Service
Potrero/22nd (East)	B	0.65	A/B	0.60	A	0.59
Potrero/22nd (West)	A	0.49	A	0.54	A	0.50
Potrero/23rd	B	0.65	C	0.79	C	0.74
Potrero/24th	A	0.56	B	0.65	C	0.71

The analysis indicates that background growth, new hospital traffic and the shift in existing hospital traffic due to proposed hospital projects would not result in significant impacts to the surrounding intersections. The intersections of Potrero with 23rd and 24th would drop from a level of service "B" to "C". No other changes in the levels of service in the area would occur.

An unsignalized level of service analysis of the operation of the hospital entrance on 23rd Street was also performed. The results are summarized below in Table 3.3.

TABLE 3.3
UNSIGNALIZED LEVEL OF SERVICE AT THE 23rd STREET HOSPITAL ENTRANCE
PM Peak Period

MOVEMENT	LEVEL OF SERVICE Existing Condition	With Garage
Northbound		
Left	-	C
Through	-	C
Right	-	A
Southbound		
Left	A	A
Through	-	A
Right	A	A
Westbound		
Left	-	A
Through	n/a	
Right	A	A
Eastbound		
Left	A	A
Through	n/a	
Right	-	A

Since service levels A-C represent good traffic conditions, Table 3.3 indicates that a garage entrance on 23rd Street opposite the main hosiptal access drive would function adequately.

SECTION 4
TRANSIT IMPACTS

Transit impacts have been determined by projecting the number of new transit riders which would be generated on a facility-specific basis and comparing this demand to the respective capacities.

Firstly, the amount of additional riders due to growth in employees and visitors associated with the Master Plan (i.e., due to the Mental Health Skilled Nursing Center) was computed. Secondly, additional transit impacts potentially associated with the "moderate" or "high" level of TSM program attainment were identified.

TRANSIT SERVICES

The project site is served by a variety of public transit systems. The principal service provider is the San Francisco Municipal Railway system (MUNI), which operates buses along Potrero Avenue as well as 23rd Street.[10] Other MUNI routes are within walking distance. Rail transit along Mission Street is provided by the Bay Area Rapid Transit District (BART). SamTrans buses between Downtown and the Peninsula run along Potrero Avenue as well as Mission Street. A shuttle bus provides a link between San Francisco General Hospital and the UC San Francisco campus.

MUNI

There are six MUNI bus transit lines within a four-block radius of the project site. Headways vary from 8 to 20 minutes during the morning and evening peak periods. The lines which provide most convenient access to the site are Routes 9, 33 and 47 on Potrero Avenue, Route 48 on 23rd Street, Route 27 on Bryant Street, and Route 19 on Rhode Island Street.

Route 9 is a north-south route that runs from the Sunnydale/Santos junction in Visitacion Valley to the Ferry Building at the foot of Market Street. It provides direct access to downtown San Francisco from the project along Potrero Avenue, 11th Street and Market Street. It operates at 8 minute headways during peak periods.

Route 33 runs from the Potrero/25th junction near the hospital to Waller/Stanyan in the Haight-Ashbury area. It provides access to the

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[10]Transit services from adjacent communities that feed into the MUNI system include SamTrans buses, the CalTrain Peninsula Commuter line, AC Transit buses and the Golden Gate Transit buses and ferries.

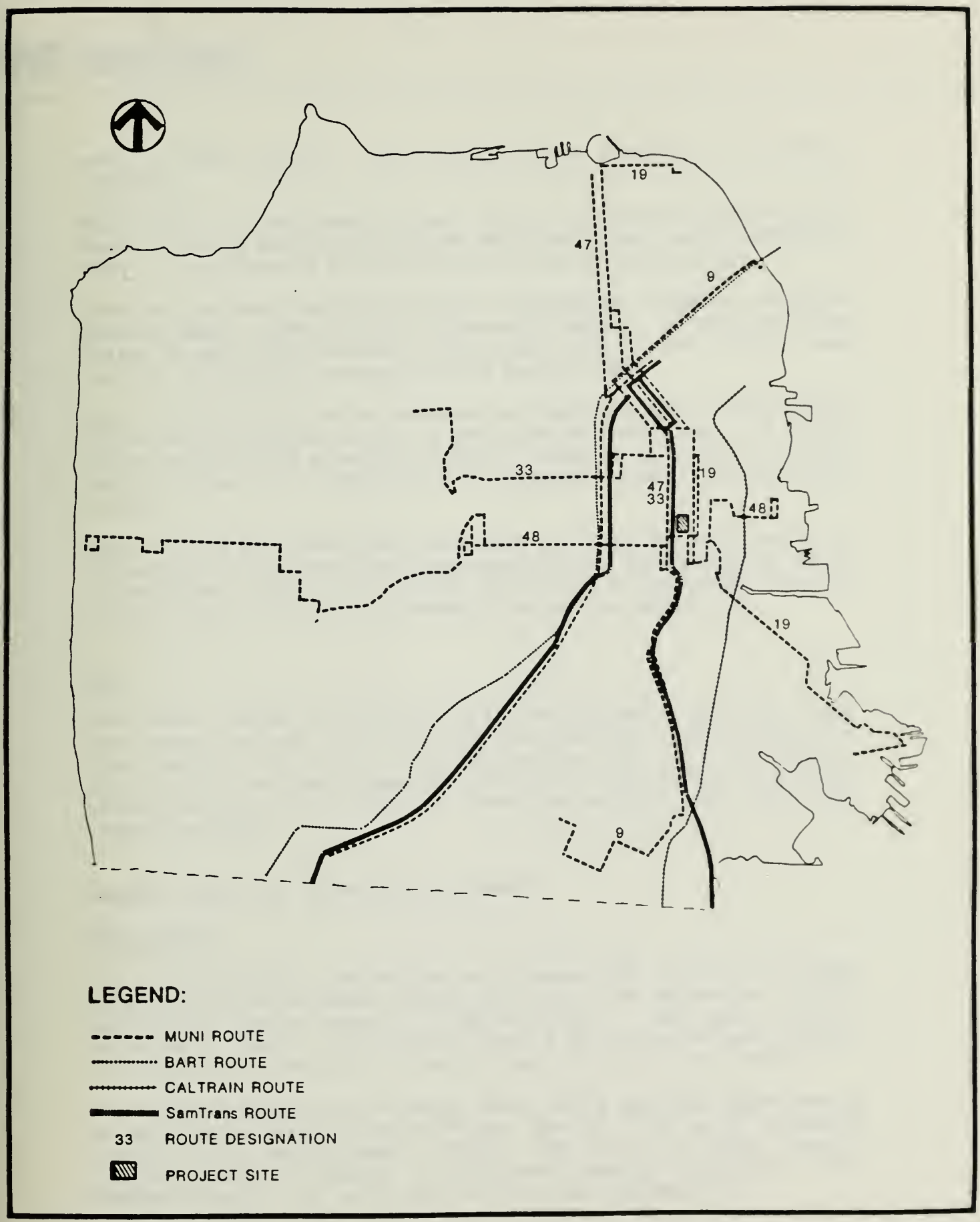

Figure 4-1
Transit Routes

west on 18th Street. The route provides service at 20 minute intervals.

Route 47 is a north-south route that runs from the Potrero/25th intersection to the junction of Van Ness/North Point near Fisherman's Wharf. It operates at 10 minute intervals during peak periods.

Route 19 runs from the Spear/B Street intersection in Hunter's Point to Stockton/Beach intersection in Fisherman's Wharf. It runs on Rhode Island Street, approximately two blocks east of the hospital and operates at 15 minute intervals during peak periods.

Route 27 provides service between the intersection of Mission/26th Street and Harrison/5th Street in the South of Market area. It serves the project vicinity along Bryant Street, which is three blocks west of Potrero Avenue. It operates at 15 minute intervals during peak periods.

Route 48 is a major east-west route that runs from the intersection of Illinois/20th Street east of the hospital to the intersection of Great Highway/Rivera Street in the Sunset District. It serves the hospital on 23rd Street with 12 minute headways during the peak period.

BART

The closest project access point to the BART system is provided at the 24th Street station, 12 blocks from the hospital. BART runs three lines through this station, the Concord-Daly City line, the Fremont-Daly City line and the Richmond-Daly City line. About half of the BART riders transferred to MUNI to reach the hospital; the other half walked from BART.

TRANSIT IMPACTS DUE TO MASTER PLAN GROWTH

MUNI Impacts

The existing pm peak load factors on the above MUNI routes (in the peak direction at the maximum load point) range from 49 percent to 112 percent of seated capacity (see Table 4.1). MUNI has a service objective of keeping load factors under 1.25 during the peak period. This criterion is met by all lines in the vicinity of the project.

The Mental Health Skilled Nursing Center would generate approximately 22 new trips on MUNI during the PM peak period. This would include 16 outbound trips and 6 inbound trips. The level of added transit ridership would not result in significant impacts on the peak load factors of any of the routes presently serving the hospital.

TABLE 4.1
PROJECT MUNI PEAK HOUR LOAD FACTORS
PM Peak Period Direction at Maximum Load Point

Route	Maximum Load Point	Total Passengers	Existing Load Factor
9	Potrero/16th	781	1.12
33	Castro/18th	145	0.48
47	Van Ness/Geary	558	0.93
19	Polk/Post	471	0.79
27	Bryant/16th	333	0.83
48	Mission/24th	512	0.93

Source: MUNI Transit Schedule Department (9/10/87).

BART Impacts

The current PM peak hour load factors on all routes to Daly City, west of the Civic Center station, is approximately 0.80. Existing load factors for the Transbay Tube, which provides service for all east bay passengers, range from 1.10 to 1.22 on the three lines.

For planning purposes, BART assumes that a 1.5 load factor is the average peak-hour use level that will be tolerated by passengers, and that passengers will balance their ridership among the available lines serving their destination. All of the existing lines operate at load factors below this level during peak periods.

Based on data provided in the employee and visitor surveys, it is estimated that the project would generate only one new BART trip during the PM peak period. The addition of this traffic would not have a measurable impact on the peak period load factors. The existing and project BART patronage is shown in Table 4.2.

TABLE 4.2
BART PATRONAGE
1987 PM Peak Period/Peak Direction

Location	Route/Direction	Total Passengers	Existing Load Factor	Existing & Project Load Factor
West of SF Civic Center Station	All routes to Daly City	6,215	0.80	0.80 (-)
Transbay Tube	Concord/Daly City	5,805	1.22	1.22 (-)
	Fremont/Daly City	4,396	1.21	1.21 (-)
	Richmond/Daly City	2,500	1.10	1.10 (-)

Source: Bay Area Rapid Transit District, "Representative Weekday Load Factors for all PM Peak Period Trains, April - June 1987".

TRANSIT IMPACTS DUE TO TSM PROGRAM

The application of á TSM program for employees has been outlined for an intermediate and a maximum level of participation. The intermediate TSM program anticipates a shift of 100 employees from auto use to transit use, while maximum participation would result in a shift of 200 persons to transit use. The potential impacts identified in this section are based upon the existing pattern of routes used to access the hospital -- if new routes are provided then increases to existing routes would be diminished.

The intermediate TSM program would add approximately 80 outbound transit riders during the PM peak period. This includes 41 MUNI riders, 26 UCSF shuttle riders, 11 BART riders and 2 SamTrans riders. The MUNI ridership totals include 7 transit users who transfer from other systems: BART (4), AC Transit (1), Golden Gate Transit (1) and CalTrain (1).

The maximum TSM program, with a shift of 200 daily employees to transit use, would add approximately 160 riders during the PM peak period. This includes 83 MUNI riders, 52 UCSF shuttle riders, 22 BART riders and 3 SamTrans riders. The 83 MUNI riders would be composed of 67 riders that use MUNI exclusively, 8 riders who transfer from BART, 3 riders who transfer from AC Transit, 3 riders who transfer from Golden Gate Transit and 2 riders who transfer from CalTrain.

The impact of increased transit ridership on MUNI resulting from the intermediate and maximum TSM programs is equivalent to about two additional bus loads of riders. Given the small population of existing bus riders, and correspondingly smaller sample size in the survey, it would be inappropriate to report impacts on a route-specific basis. However, an analysis was accomplished to look at potential impacts upon maximum load factors on specific routes. This analysis indicated that the only route which could be measurably affected would be Route 47.

The shift of employees to the BART system that would result from the TSM programs would not impact the peak load factor. The existing load factor of 0.80 on the BART line westbound, west of the Civic Center station would not increase with the addition of 11 or 12 trips associated with the intermediate and maximum TSM programs.

SECTION 5
ON-SITE CIRCULATION

A qualitative analysis of the vehicular and pedestrian circulation system in the immediate vicinity of the hospital was conducted. The Master Plan could include improvements at the following locations.

Potrero/23rd Intersection

The traffic signalization could be updated to treat this offset four-leg intersection as two interconnected signals. Progressions could be established for the principal movements through the intersection and programmed visibility heads could be used to eliminate confusion to drivers negotiating the jog along 23rd Street.

Hospital Main Curbside

The existing pull-outs are undersized and could be enlarged. Two travel lanes and one continuous curb lane could be provided northbound by extending the sidewalk by 3 feet and eliminating 12 feet of the existing landscaped median.

Missing Sidewalk on Vermont Street

The west side of Vermont Street between the corner of Vermont/23rd and the hospital service zone lacks a sidewalk.

Service Dock

The existing configuration is adequate for a "design vehicle" but does not function well with the largest trucks now legal. A swinging dock could be constructed in the south bay to allow extra-long vehicles to angle park without blocking Vermont Street.

Fire Lane

The existing fire access lane along Potrero Avenue is filled with numerous illegal parkers. Fire truck access and maneuverability requires a minimum of 16 feet width to allow passage of a fire truck and automobile, with 20 feet desirable. No vehicles should be parked between the fire access lane and the buildings.

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TRANSPORTATION STUDY

SAN FRANCISCO GENERAL HOSPITAL MEDICAL CENTER

MASTER PLAN UPDATE

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APPENDIX A

PARKING SURVEY

PARKING SURVEY

A parking survey was conducted on a typical weekday (Thursday) for the San Francisco General Hospital and the surrounding areas. The survey staff noted, for on-street and hospital lot parking areas, the number of occupied spaces every hour between the hours of 5:30 am and 5:30 pm. Additionally, license plates were recorded for samples of cars parked in these spaces to enable an estimate of parking duration.

The results of this survey are tabulated in this Appendix. The areas in which the On-Street and On-Site parking studies were conducted are displayed in Figures A1 and A2, respectively.

On-Street

The on-street survey revealed several important characteristics about parking in the vicinity of San Francisco General Hospital. These characteristics are listed below:

- Parking stalls located within 1 block of the hospital are over 90 percent occupied between the hours of 7:30 am and 3:30 pm. Between 1 and 2 blocks from the hospital, parking stalls are over 90 percent occupied from 8:30 am to 2:45 pm. Beyond two blocks from the hospital, the maximum observed utilization was about 75 percent.

- Within the Mission Neighborhood, parking utilization rates exceed 85 percent between 10:30 am and 3:30 pm. The rates are greater than 90 percent between 1:30 pm and 3:30 pm.

- Parking utilization rates within the Potrero Hill Neighborhood, as a whole, do not exceed 75 percent occupancy during the day. Some individual blocks close to the hospital, however, experience greater than 90 percent occupancy during much of the day.

- The average parking duration within one block of the hospital is about 5.4 hours. This decreases to about 4.0 hours in the remainder of the study area.

- The average parking duration in the Mission Neighborhood is approximately 3.8 hours. The Potrero Hill Neighborhood experiences an average duration of 5.4 hours.

On-Site

An inventory of the available on-site parking stalls, and associated parking restrictions is listed in Table A2.1.

The on-site parking survey also identified several important characteristics regarding parking in the hospital lots. These are summarized below:

- Parking occupancy rates are well in excess of 100 percent between the hours of 7:30 am and 3:30 pm. A high number of parkers in unmarked and/or illegal parking stalls is indicated.

- Cars were observed to be parked in a "stack" or "valet" type of arrangement in many of the hospital lots.

- Average parking durations within the visitor lot were approximately 2.3 hours. The overall hospital lot duration was 4.9 hours.

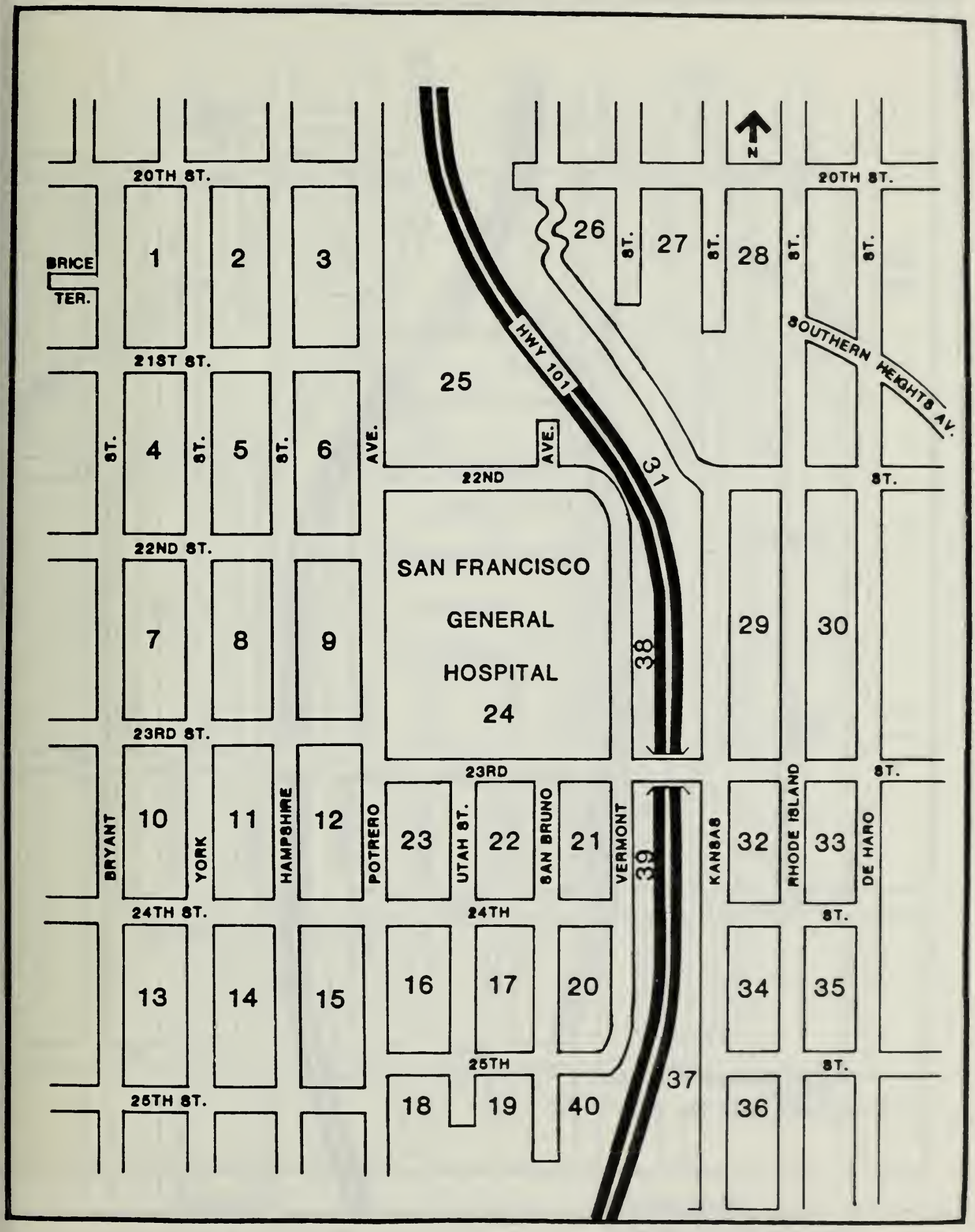

20TH ST.
BRICE TER.
1
2
3
21ST ST.
4
5
6
22ND ST.
7
8
9
23RD ST.
10
11
12
24TH ST.
13
14
15
25TH ST.
BRYANT
YORK
HAMPSHIRE
POTRERO
AVE.
25
HWY 101
AVE.
22ND
SAN FRANCISCO GENERAL HOSPITAL
24
23RD
23
UTAH ST.
22
SAN BRUNO
21
24TH
16
17
20
25TH
18
19
40
VERMONT
31
38
39
37
N
26
27
28
ST.
20TH ST.
SOUTHERN HEIGHTS AV.
29
30
KANSAS
32
RHODE ISLAND
33
DE HARO
34
35
36

Figure A-1

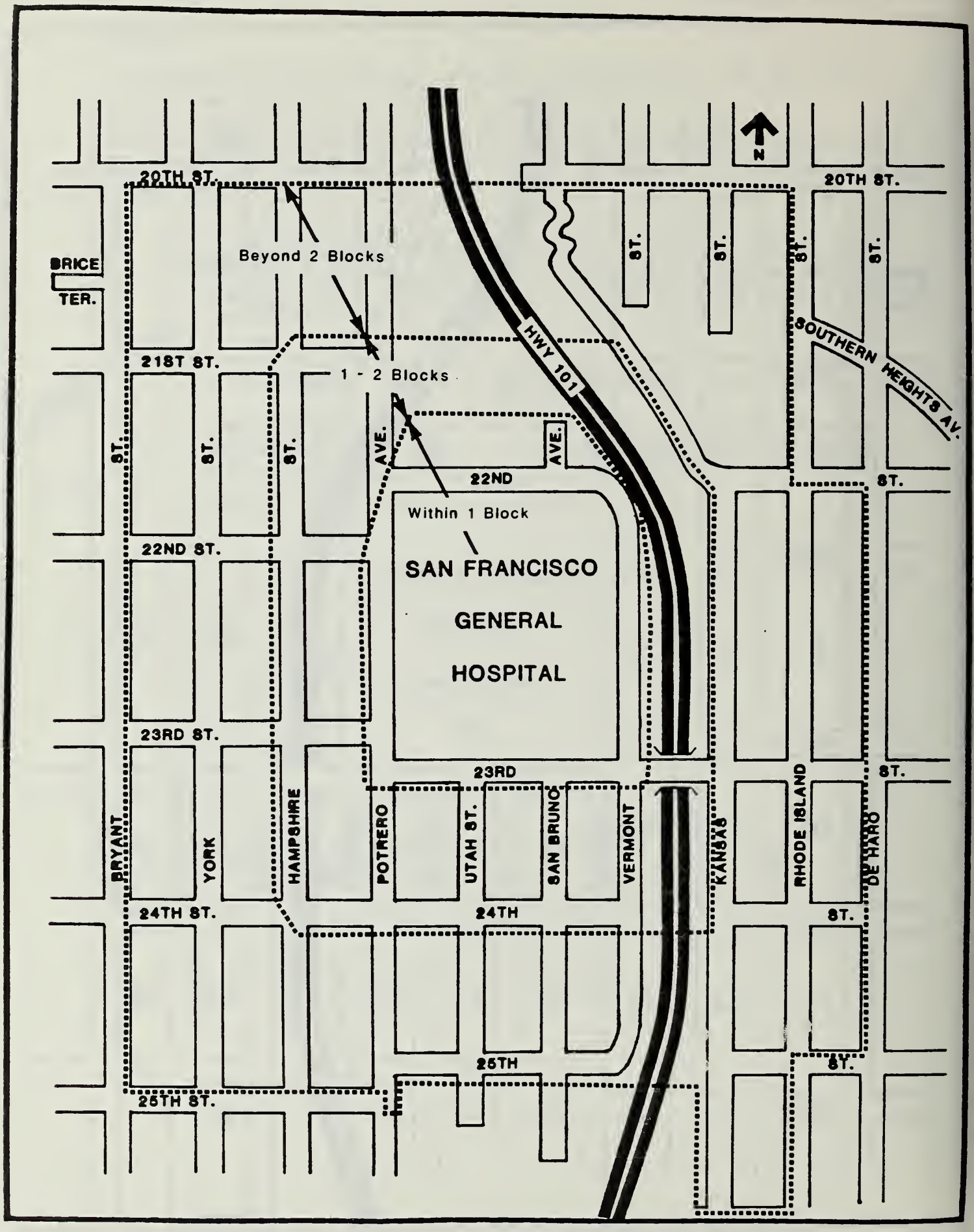


Figure A-2
Parking Influence Area

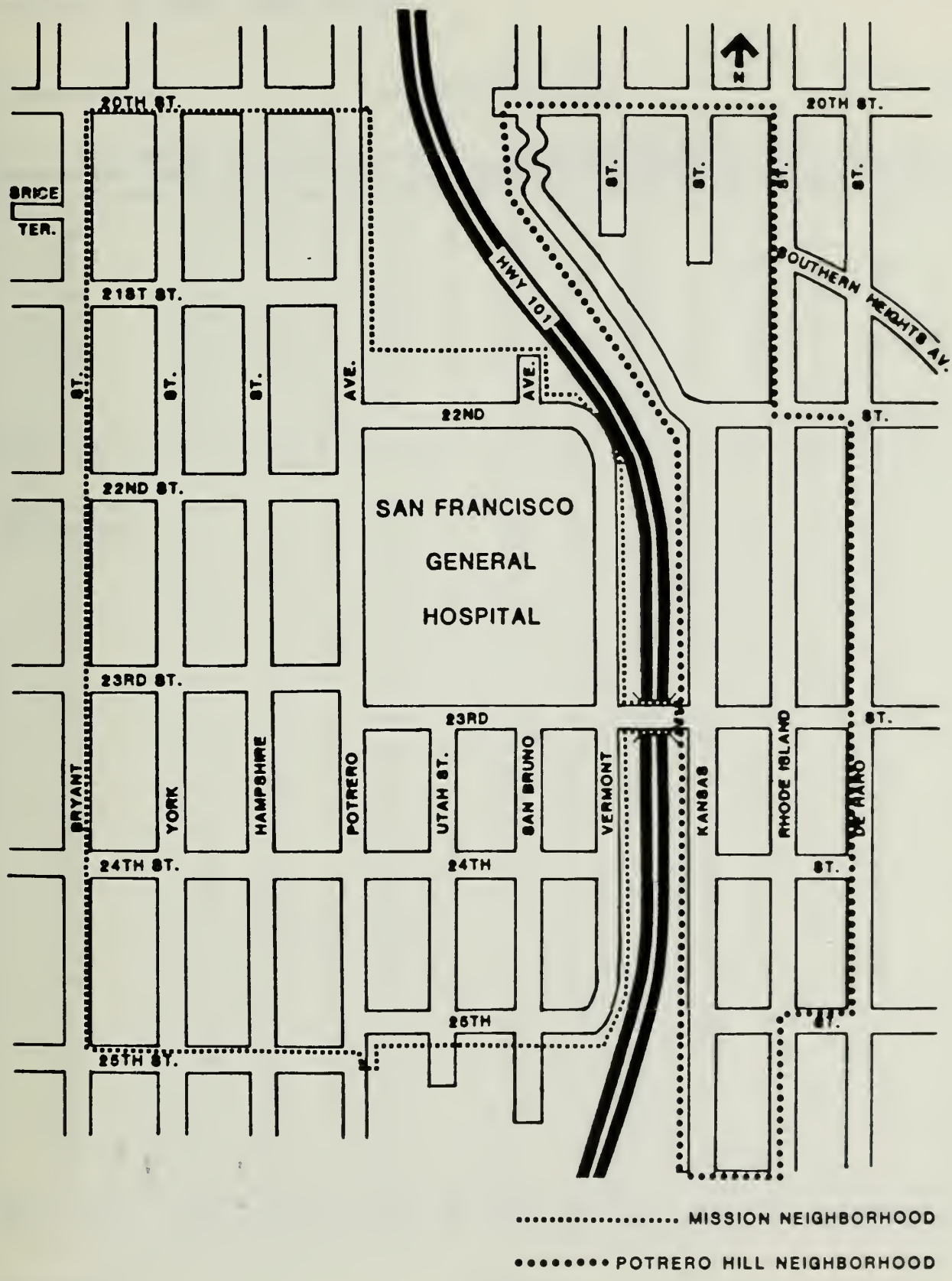


Figure A-3
Neighborhood Areas

TABLE A-1.1
OCCUPANCY BY RADIUS FROM HOSPITAL

SFGH MASTER PLAN UPDATE — ON-STREET PARKING SURVEY (8/20/87) — 09/17/87

LOT/BLOCK-FACE NUMBER	AVAILABLE SPACES	HOURLY PARKING ACCUMULATION 5:30 am	6:30 am	7:30 am	8:30 am	9:30 am	10:30 am	11:30 am	12:30 pm	1:30 pm	2:45 pm	3:30 pm	4:30 pm	5:30 pm
21N	7	2	5	5	6	6	7	7	5	6	5	5	4	4
22N	5	3	4	4	5	5	5	5	5	5	5	5	5	4
23N	5	5	5	5	5	5	5	5	5	5	5	5	5	5
24E	58	19	27	51	58	57	58	58	58	58	58	54	35	30
24N	18	17	16	17	18	18	18	18	17	18	18	17	15	11
24S	18	18	18	18	18	18	18	18	18	18	18	15	13	12
24W	28	26	24	26	26	28	26	28	28	28	28	28	28	22
25S	45	23	44	45	43	45	45	45	45	45	45	45	44	32
38W1	26	9	11	20	23	26	26	25	26	26	26	25	18	14
38W2	72	19	19	67	70	69	69	72	69	72	72	64	47	39
9E	18	7	15	14	14	14	16	16	15	15	17	17	16	15
Total within 1 Block	300	148	188	272	286	291	293	297	291	296	297	280	230	188
23rd St. Overpass N	11	5	7	10	11	10	11	10	8	10	11	11	10	8
23rd St. Overpass S	11	6	8	11	11	11	11	11	11	11	11	10	7	6
11E	17	11	16	16	16	15	15	17	17	17	17	17	17	17
12E	14	12	10	10	10	9	9	11	14	14	14	14	14	13
12N	6	6	5	5	2	1	1	4	5	5	5	5	4	5
12S	8	1	0	2	7	5	5	5	6	6	5	6	4	2
12W	15	7	14	14	15	4	2	15	13	14	15	15	15	15
15N	8	7	8	7	7	7	8	6	7	8	6	6	6	6
16N	7	5	6	2	4	6	7	7	7	7	6	7	6	7
17N	10	6	5	6	6	7	10	9	9	8	10	10	8	8
20N	6	6	6	6	6	6	6	6	6	6	6	6	6	5
21E	18	12	16	18	18	18	18	18	17	17	17	14	14	12
21S	6	6	6	6	6	6	5	6	4	6	6	6	4	3
21W	14	10	14	13	14	14	14	14	14	13	14	10	7	6
22E	43	23	39	36	37	43	42	43	42	42	43	34	24	19
22S	7	7	7	7	7	7	7	7	7	7	7	7	5	4
22W	44	31	40	39	39	43	42	42	42	43	43	40	29	24
23E	17	8	13	12	17	17	16	17	17	17	17	14	12	9
23S	7	4	5	5	7	7	7	7	7	6	6	5	5	7
23W	15	12	12	12	14	15	15	15	15	15	15	15	11	11
25E	24	6	6	22	24	24	24	23	24	24	24	19	17	9
25W	34	22	23	34	34	34	34	34	34	34	34	34	30	19
31E1	0	NO PARKING ANY TIME												
31E2	43	21	20	32	43	43	43	41	42	37	31	34	36	36
39W	102	35	45	52	95	102	102	100	100	99	97	82	58	49
3S	6	5	6	6	6	6	6	6	6	6	6	6	6	6
5E	21	19	17	17	18	18	17	17	18	18	19	18	19	20
6E	10	9	9	10	9	9	10	9	10	10	10	9	7	10
6N	6	4	3	2	1	6	6	6	6	6	6	6	5	5
6S	6	4	3	3	2	2	2	3	2	3	4	4	4	4
6W	14	14	11	11	12	14	14	10	9	12	14	14	14	14
8E	14	14	14	14	14	14	14	14	12	14	13	13	13	13
9N	6	3	3	3	3	3	4	4	4	5	6	6	5	6
9S	10	9	8	10	8	10	1	10	10	10	10	10	9	10
9W	18	18	16	18	17	17	14	9	12	14	14	14	13	13
Total 1 - 2 Blocks	598	368	421	471	540	552	542	556	537	564	562	521	444	401

LOT/BLOCK-FACE NUMBER	AVAILABLE SPACES	HOURLY PARKING ACCUMULATION 5:30 am	6:30 am	7:30 am	8:30 am	9:30 am	10:30 am	11:30 am	12:30 pm	1:30 pm	2:45 pm	3:30 pm	4:30 pm	5:30 pm
10E	19	13	12	13	15	4	6	18	16	16	18	18	17	16
10N	5	5	2	3	2	1	1	1	2	4	4	4	4	4
10S	8	0	0	0	4	4	4	6	3	5	4	5	6	6
10W	12	12	10	5	1	0	9	11	9	10	9	10	11	9
11N	7	7	5	4	2	0	6	7	7	6	6	6	7	7
11S	10	0	1	2	5	2	4	7	5	5	5	5	5	7
11W	16	11	15	15	13	12	13	16	16	16	13	14	16	16
13E	14	12	6	4	3	2	3	11	10	14	14	14	14	14
13N	6	2	3	3	3	3	4	6	6	3	5	5	5	5
13S	0	--	--	--	--	--	--	--	--	--	--	--	--	--
13W	8	8	8	4	2	0	6	8	7	6	8	7	8	8
14E	15	15	15	15	15	15	15	14	15	15	14	15	15	15
14N	10	6	3	2	5	8	7	8	9	7	8	8	7	7
14S	8	8	7	6	6	6	6	6	5	5	5	5	3	4
14W	19	17	14	16	17	18	19	19	19	17	13	18	19	19
15E	11	7	8	8	8	9	11	9	10	10	10	9	8	9
15S	10	8	7	9	9	9	9	9	9	8	9	9	9	9
15W	18	16	15	8	6	4	9	11	16	18	15	17	16	16
16E	15	15	15	15	15	15	14	15	15	15	15	13	11	11
16S	7	6	7	7	7	7	7	7	7	7	7	7	6	7
16W	14	11	9	12	12	12	13	13	12	11	12	12	9	10
17E	13	13	13	13	13	13	12	12	11	12	12	6	9	9
17S	10	8	8	8	8	8	8	8	8	8	8	7	8	8
17W	15	15	14	15	15	15	15	15	14	14	11	12	6	7
18N	9	5	8	9	8	7	9	9	9	9	9	6	8	8
18W	4	3	4	2	2	2	2	2	1	1	1	0	0	0
19N	10	6	6	7	7	8	8	7	8	9	9	9	9	9
1E	26	22	21	18	16	15	11	7	7	13	20	18	17	18
1N	7	4	5	5	5	5	5	5	5	5	5	5	5	7
1S	7	4	4	4	4	4	4	4	4	4	4	5	5	6
1W	13	12	9	9	10	9	6	7	4	9	13	13	13	13
20E	15	8	12	11	14	15	15	15	15	15	15	14	11	11
20S	2	2	2	2	2	2	2	2	2	2	2	2	2	2
20W	13	11	11	11	12	12	12	12	12	12	10	10	11	11
26E	14	11	8	6	4	6	6	8	9	8	8	8	6	10
26N	7	0	1	0	0	0	0	1	0	0	1	1	2	2
26S	17	3	3	3	2	2	2	1	1	1	2	2	2	2
27E	22	22	22	17	17	21	19	18	22	22	22	22	22	22
27N	6	0	0	0	0	0	0	0	0	0	1	1	1	1
27S	5	11	11	12	23	24	24	24	24	22	21	21	21	22
27W	5	5	5	5	4	4	4	4	4	2	4	4	5	5
28E	25	25	23	15	19	16	18	15	18	17	13	13	18	18
28N	5	5	5	3	4	3	4	3	2	2	1	3	2	4
28S	7	2	2	3	4	7	7	7	7	7	7	7	5	2
28W	15	15	15	15	14	12	11	11	8	4	6	7	12	15
29E	26	15	14	11	14	23	23	21	20	20	22	22	19	16
29N	22	8	6	9	16	20	21	20	19	20	18	18	9	5
29S	8	6	3	7	8	8	8	8	8	8	8	8	8	8
29W	43	32	28	26	42	43	43	43	43	43	43	43	43	43
2E	19	18	18	18	18	18	19	19	19	17	16	16	17	17
2N	9	8	9	7	6	5	7	9	7	7	6	5	9	8
2S	6	6	6	6	6	6	6	6	6	6	6	5	5	6

LOT/BLOCK-FACE NUMBER	AVAILABLE SPACES	HOURLY PARKING ACCUMULATION 5:30 am	6:30 am	7:30 am	8:30 am	9:30 am	10:30 am	11:30 am	12:30 pm	1:30 pm	2:45 pm	3:30 pm	4:30 pm	5:30 pm
2W	19	18	17	17	17	19	19	19	11	15	19	16	17	18
30E	22	22	22	21	15	16	14	13	14	15	15	16	18	21
30N	8	3	3	3	3	1	1	1	1	1	1	1	1	1
30S	9	5	5	5	6	7	7	7	5	6	8	8	8	8
30W	59	50	49	41	42	49	45	48	47	48	45	45	45	38
32E	0	CONSTRUCTION												
32N	0	CONSTRUCTION												
32S	0	CONSTRUCTION												
32W	0	CONSTRUCTION												
33E	45	28	26	27	21	21	16	18	16	21	21	20	19	19
33N	8	3	3	3	3	7	7	7	7	7	7	6	5	4
33S	9	4	4	4	3	3	3	2	2	2	1	1	1	1
33W	38	32	29	30	32	33	35	36	35	36	37	38	28	25
34E	13	12	9	9	9	8	9	7	10	11	8	9	7	10
34N	9	4	4	4	8	9	9	9	7	9	7	7	6	6
34S	8	3	3	3	3	3	4	3	3	3	4	4	5	4
34W	14	11	11	9	12	12	12	10	12	12	13	12	9	11
35E	12	11	10	10	4	5	6	7	7	4	4	3	3	5
35N	20	13	17	13	8	12	12	11	13	12	10	11	11	7
35S	8	5	5	5	3	4	3	3	3	3	2	2	1	2
35W	13	11	11	9	11	11	11	10	7	9	7	8	5	8
36E	14	14	8	7	5	5	5	4	4	4	3	3	10	10
36N	21	16	16	13	10	12	15	10	10	9	9	8	12	13
36S	0	NO PARKING ANY TIME												
36W	16	7	7	5	5	8	8	6	8	8	8	7	11	8
37E1	18	16	16	18	18	18	18	18	18	18	18	18	10	9
37E2	23	13	13	17	19	20	20	20	19	19	19	19	14	11
37E3	30	11	11	11	14	16	17	17	10	11	10	8	6	5
3E	19	15	15	15	16	14	14	16	18	18	18	16	10	12
3N	7	7	7	7	7	7	7	6	7	7	7	7	7	6
3W	20	20	16	14	12	16	15	9	6	11	17	18	18	18
40N	5	3	4	4	5	5	5	5	5	5	4	4	4	5
4E	17	17	17	16	15	15	11	8	7	10	13	16	17	17
4N	7	7	4	1	1	6	6	7	7	7	7	7	6	7
4S	8	6	6	4	1	2	4	7	6	7	8	7	8	8
4W	17	16	13	14	14	13	10	8	17	16	15	14	16	16
5N	6	5	4	3	2	4	4	5	4	3	3	4	4	6
5S	5	2	2	1	0	2	4	4	3	4	4	3	4	4
5W	16	16	15	15	15	16	16	16	13	13	12	12	14	14
7E	20	20	17	18	16	16	16	9	10	11	12	15	18	20
7N	10	10	10	10	10	10	9	9	9	9	10	10	9	8
7S	9	9	9	9	8	8	8	8	8	8	9	9	8	5
7W	15	15	15	15	11	4	10	8	6	7	12	10	10	10
8N	5	5	4	4	3	3	2	1	4	3	4	4	4	4
8S	8	8	7	7	7	8	7	7	7	7	7	7	6	7
8W	16	16	16	16	16	16	16	16	16	16	16	16	15	16
Total Beyond 2 Blocks	1283	993	938	885	897	928	957	960	937	962	972	963	936	941
GRAND TOTAL	2181	1509	1547	1628	1723	1772	1792	1813	1785	1822	1831	1764	1610	1550

TABLE A-1.2
PERCENTAGE OCCUPANCY BY RADIUS FROM HOSPITAL

SF6H MASTER PLAN UPDATE — ON-STREET PARKING SURVEY (8/20/87) — 09/17/87

LOT/BLOCK-FACE NUMBER	AVAILABLE SPACES	HOURLY PARKING UTILIZATION (percentage) 5:30 am	6:30 am	7:30 am	8:30 am	9:30 am	10:30 am	11:30 am	12:30 pm	1:30 pm	2:45 pm	3:30 pm	4:30 pm	5:30 pm
21N	7	29	71	71	86	86	100	100	71	86	71	71	57	57
22N	5	60	80	80	100	100	100	100	100	100	100	100	100	80
23N	5	100	100	100	100	100	100	100	100	100	100	100	100	100
24E	58	33	47	88	100	98	100	100	100	100	100	93	60	52
24N	18	94	89	94	100	100	100	100	94	100	100	94	83	61
24S	18	100	100	100	100	100	100	100	100	100	100	83	72	67
24W	28	93	86	93	93	100	93	100	100	100	100	100	100	79
25S	45	51	98	100	96	100	100	100	100	100	100	100	98	71
38W1	26	35	42	77	88	100	100	96	100	100	100	96	69	54
38W2	72	26	26	93	97	96	96	100	96	100	100	89	65	54
9E	18	39	83	78	78	78	89	89	83	83	94	94	89	83
Total within 1 Block	300	49	63	91	95	97	98	99	97	99	99	93	77	63
23rd St. Overpass N	11	45	64	91	100	91	100	91	73	91	100	100	91	73
23rd St. Overpass S	11	55	73	100	100	100	100	100	100	100	100	91	64	55
11E	17	65	94	94	94	88	88	100	100	100	100	100	100	100
12E	14	86	71	71	71	64	64	79	100	100	100	100	100	93
12N	6	100	83	83	33	17	17	67	83	83	83	83	67	83
12S	8	13	0	25	88	63	63	63	75	75	63	75	50	25
12W	15	47	93	93	100	27	13	100	87	93	100	100	100	100
15N	8	88	100	88	88	88	100	75	88	100	75	75	75	75
16N	7	71	86	29	57	86	100	100	100	100	86	100	86	100
17N	10	60	50	60	60	70	100	90	90	80	100	100	80	80
20N	6	100	100	100	100	100	100	100	100	100	100	100	100	83
21E	18	67	89	100	100	100	100	100	94	94	94	78	78	67
21S	6	100	100	100	100	100	83	100	67	100	100	100	67	50
21W	14	71	100	93	100	100	100	100	100	93	100	71	50	43
22E	43	53	91	84	86	100	98	100	98	98	100	79	56	44
22S	7	100	100	100	100	100	100	100	100	100	100	100	71	57
22W	44	70	91	89	89	98	95	95	95	98	98	91	66	55
23E	17	47	76	71	100	100	94	100	100	100	100	82	71	53
23S	7	57	71	71	100	100	100	100	100	86	86	71	71	100
23W	15	80	80	80	93	100	100	100	100	100	100	100	73	73
25E	24	25	25	92	100	100	100	96	100	100	100	79	71	38
25W	34	65	68	100	100	100	100	100	100	100	100	100	88	56
31E1	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
31E2	43	49	47	74	100	100	100	95	98	86	72	79	84	84
39W	102	34	44	51	93	100	100	98	98	97	95	80	57	48
3S	6	83	100	100	100	100	100	100	100	100	100	100	100	100
5E	21	90	81	81	86	86	81	81	86	86	90	86	90	95
6E	10	90	90	100	90	90	100	90	100	100	100	90	70	100
6N	6	67	50	33	17	100	100	100	100	100	100	100	83	83
6S	6	67	50	50	33	33	33	50	33	50	67	67	67	67
6W	14	100	79	79	86	100	100	71	64	86	100	100	100	100
8E	14	100	100	100	100	100	100	100	86	100	93	93	93	93
9N	6	50	50	50	50	50	67	67	67	83	100	100	83	100
9S	10	90	80	100	80	100	10	100	100	100	100	100	90	100
9W	18	100	89	100	94	94	78	50	67	78	78	78	72	72
Total 1 - 2 Blocks	598	62	70	79	90	92	91	93	93	94	94	87	74	67

LOT/BLOCK-FACE NUMBER	AVAILABLE SPACES	HOURLY PARKING UTILIZATION (percentage) 5:30 am	6:30 am	7:30 am	8:30 am	9:30 am	10:30 am	11:30 am	12:30 pm	1:30 pm	2:45 pm	3:30 pm	4:30 pm	5:30 pm
10E	19	68	63	68	79	21	32	95	84	84	95	95	89	84
10N	5	100	40	60	40	20	20	20	40	80	80	80	80	80
10S	8	0	0	0	50	50	50	75	38	63	50	63	75	75
10W	12	100	83	42	8	0	75	92	75	83	75	83	92	75
11N	7	100	71	57	29	0	86	100	100	86	86	86	100	100
11S	10	0	10	20	50	20	40	70	50	50	50	50	50	70
11W	16	69	94	94	81	75	81	100	100	100	81	88	100	100
13E	14	86	43	29	21	14	21	79	71	100	100	100	100	100
13N	6	33	50	50	50	50	67	100	100	50	83	83	83	83
13S	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
13W	8	100	100	50	25	0	75	100	88	75	100	88	100	100
14E	15	100	100	100	100	100	100	93	100	100	93	100	100	100
14N	10	60	30	20	50	80	70	80	90	70	80	80	70	70
14S	8	100	88	75	75	75	75	75	63	63	63	63	38	50
14W	19	89	74	84	89	95	100	100	100	89	68	95	100	100
15E	11	64	73	73	73	82	100	82	91	91	91	82	73	82
15S	10	80	70	90	90	90	90	90	90	80	90	90	90	90
15W	18	89	83	44	33	22	50	61	89	100	83	94	89	89
16E	15	100	100	100	100	100	93	100	100	100	100	87	73	73
16S	7	86	100	100	100	100	100	100	100	100	100	100	86	100
16W	14	79	64	86	86	86	93	93	86	79	86	86	64	71
17E	13	100	100	100	100	100	92	92	85	92	92	46	69	69
17S	10	80	80	80	80	80	80	80	80	80	80	70	80	80
17W	15	100	93	100	100	100	100	100	93	93	73	80	40	47
18N	9	56	89	100	89	78	100	100	100	100	100	67	89	89
18W	4	75	100	50	50	50	50	50	25	25	25	0	0	0
19N	10	60	60	70	70	80	80	70	80	90	90	90	90	90
1E	26	85	81	69	62	58	42	27	27	50	77	69	65	69
1N	7	57	71	71	71	71	71	71	71	71	71	71	71	100
1S	7	57	57	57	57	57	57	57	57	57	57	71	71	86
1W	13	92	69	69	77	69	46	54	31	69	100	100	100	100
20E	15	53	80	73	93	100	100	100	100	100	100	93	73	73
20S	2	100	100	100	100	100	100	100	100	100	100	100	100	100
20W	13	85	85	85	92	92	92	92	92	92	77	77	85	85
26E	14	79	57	43	29	43	43	57	64	57	57	57	43	71
26N	7	0	14	0	0	0	0	14	0	0	14	14	29	29
26S	17	18	18	18	12	12	12	6	6	6	12	12	12	12
27E	22	100	100	77	77	95	86	82	100	100	100	100	100	100
27N	6	0	0	0	0	0	0	0	0	0	17	17	17	17
27S	5	220	220	240	460	480	480	480	480	440	420	420	420	440
27W	5	100	100	100	80	80	80	80	80	40	80	80	100	100
28E	25	100	92	60	76	64	72	60	72	68	52	52	72	72
28N	5	100	100	60	80	60	80	60	40	40	20	60	40	80
28S	7	29	29	43	57	100	100	100	100	100	100	100	71	29
28W	15	100	100	100	93	80	73	73	53	27	40	47	80	100
29E	26	58	54	42	54	88	88	81	77	77	85	85	73	62
29N	22	36	27	41	73	91	95	91	86	91	82	82	41	23
29S	8	75	38	88	100	100	100	100	100	100	100	100	100	100
29W	43	74	65	60	98	100	100	100	100	100	100	100	100	100
2E	19	95	95	95	95	95	100	100	100	89	84	84	89	89
2N	9	89	100	78	67	56	78	100	78	78	67	56	100	89
2S	6	100	100	100	100	100	100	100	100	100	100	83	83	100

LOT/BLOCK-FACE NUMBER	AVAILABLE SPACES	HOURLY PARKING UTILIZATION (percentage) 5:30 am	6:30 am	7:30 am	8:30 am	9:30 am	10:30 am	11:30 am	12:30 pm	1:30 pm	2:45 pm	3:30 pm	4:30 pm	5:30 pm
2W	19	95	89	89	89	100	100	100	58	79	100	84	89	95
30E	22	100	100	95	68	73	64	59	64	68	68	73	82	95
30N	8	38	38	38	38	13	13	13	13	13	13	13	13	13
30S	9	56	56	56	67	78	78	78	56	67	89	89	89	89
30W	59	85	83	69	71	83	76	81	80	81	76	76	76	64
32E	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
32N	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
32S	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
32W	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
33E	45	62	58	60	47	47	36	40	36	47	47	44	42	42
33N	8	38	38	38	38	88	88	88	88	88	88	75	63	50
33S	9	44	44	44	33	33	33	22	22	22	11	11	11	11
33W	38	84	76	79	84	87	92	95	92	95	97	100	74	66
34E	13	92	69	69	69	62	69	54	77	85	62	69	54	77
34N	9	44	44	44	89	100	100	100	78	100	78	78	67	67
34S	8	38	38	38	38	38	50	38	38	38	50	50	63	50
34W	14	79	79	64	86	86	86	71	86	86	93	86	64	79
35E	12	92	83	83	33	42	50	58	58	33	33	25	25	42
35N	20	65	85	65	40	60	60	55	65	60	50	55	55	35
35S	8	63	63	63	38	50	38	38	38	38	25	25	13	25
35W	13	85	85	69	85	85	85	77	54	69	54	62	38	62
36E	14	100	57	50	36	36	36	29	29	29	21	21	71	71
36N	21	76	76	62	48	57	71	48	48	43	43	38	57	62
36S	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
36W	16	44	44	31	31	50	50	38	50	50	50	44	69	50
37E1	18	89	89	100	100	100	100	100	100	100	100	100	56	50
37E2	23	57	57	74	83	87	87	87	83	83	83	83	61	48
37E3	30	37	37	37	47	53	57	57	33	37	33	27	20	17
3E	19	79	79	79	84	74	74	84	95	95	95	84	53	63
3N	7	100	100	100	100	100	100	86	100	100	100	100	100	86
3W	20	100	80	70	60	80	75	45	30	55	85	90	90	90
40N	5	60	80	80	100	100	100	100	100	100	80	80	80	100
4E	17	100	100	94	88	88	65	47	41	59	76	94	100	100
4N	7	100	57	14	14	86	86	100	100	100	100	100	86	100
4S	8	75	75	50	13	25	50	88	75	88	100	88	100	100
4W	17	94	76	82	82	76	59	47	100	94	88	82	94	94
5N	6	83	67	50	33	67	67	83	67	50	50	67	67	100
5S	5	40	40	20	0	40	80	80	60	80	80	60	80	80
5W	16	100	94	94	94	100	100	100	81	81	75	75	88	88
7E	20	100	85	90	80	80	80	45	50	55	60	75	90	100
7N	10	100	100	100	100	100	90	90	90	90	100	100	90	80
7S	9	100	100	100	89	89	89	89	89	89	100	100	89	56
7W	15	100	100	100	73	27	67	53	40	47	80	67	67	67
8N	5	100	80	80	60	60	40	20	80	60	80	80	80	80
8S	8	100	88	88	88	100	88	88	88	88	88	88	75	88
8W	16	100	100	100	100	100	100	100	100	100	100	100	94	100
Total Beyond 2 Blocks	1283	77	73	69	70	72	75	75	73	75	76	75	73	73
GRAND TOTAL	2161	69	71	75	79	81	82	83	82	84	84	81	74	70

TABLE A-1.3
ILLEGAL PARKING BY RADIUS FROM HOSPITAL

SF6H MASTER PLAN UPDATE — ON-STREET PARKING SURVEY (8/20/87) — 09/17/87

LOT/BLOCK-FACE NUMBER	AVAILABLE SPACES	HOURLY ILLEGAL PARKING ACCUMULATION 5:30 am	6:30 am	7:30 am	8:30 am	9:30 am	10:30 am	11:30 am	12:30 pm	1:30 pm	2:45 pm	3:30 pm	4:30 pm	5:30 pm
21N	7													
22N	5					1	2	2	1					
23N	5	1	1	3	3	3	3	3	3	3	2	2	1	1
24E	58				2		1	1	2					
24N	18					2	2							
24S	18			3	7	3	3	7	7	7	5			
24W	28							1	1		2	2	1	
25S	45					1		1						
38W1	26	2				2	2							
38W2	72									1	2			
9E	18													
Total within 1 Block	300	3	1	6	12	12	13	15	14	11	11	4	2	1
23rd St. Overpass N	11													
23rd St. Overpass S	11						1			1	1			
11E	17									1	2		1	2
12E	14												1	
12N	6	1												
12S	8													
12W	15				2						2		1	2
15N	8													
16N	7						1		1			1		
17N	10													
20N	6	3	3	2	2	3	4	2	1	1	1	2		
21E	18			1	1	1								
21S	6	1	2							1	1	1		
21W	14													
22E	43					3								
22S	7	1	1	1	1									
22W	44													
23E	17							1						
23S	7							1	1					
23W	15													
25E	24													
25W	34					3	3	1	1		4	10		
31E1	0													
31E2	43													
39W	102					2								
3S	6				1	1	1	1	1		1			
5E	21	10	7		9	6	7	6	3		1	1		
6E	10										2	0	0	1
6N	6													
6S	6	2	2	1	1	2	3	3	3		1	1		
6W	14	11	10		5	5	4	4	3		3	3	3	5
8E	14	9						1		2				
9N	6													
9S	10								1					
9W	18	2												
Total 1 - 2 Blocks	598	40	25	5	22	26	24	22	15	6	19	19	6	10

LOT/BLOCK-FACE NUMBER	AVAILABLE SPACES	HOURLY ILLEGAL PARKING ACCUMULATION 5:30 am	6:30 am	7:30 am	8:30 am	9:30 am	10:30 am	11:30 am	12:30 pm	1:30 pm	2:45 pm	3:30 pm	4:30 pm	5:30 pm
10E	19													
10N	5	3												
10S	8													
10W	12	1												
11N	7	2												
11S	10													
11W	16							1		3			3	2
13E	14										1	2	4	
13N	6								1					
13S	0													
13W	8	1						1					2	
14E	15	3	1	2		2	2					3	3	
14N	10													
14S	8													
14W	19						1		1					
15E	11													
15S	10													
15W	18													
16E	15										1			
16S	7			1		1	1		2	2	1			
16W	14													
17E	13													
17S	10													
17W	15			1				1						
18N	9													
18W	4		2											
19N	10													
1E	26	6	6		3			1	1		1	1	1	
1N	7													1
1S	7													
1W	13	3	3		3	2	3	3		3	3		3	3
20E	15													
20S	2	3	3	3	3	2	3	3	3	5	3	1	1	1
20W	13													
26E	14													
26N	7													
26S	17													
27E	22	7	4						1	2	1	2		3
27N	6													
27S	5													
27W	5	1	1										2	2
28E	25	2												
28N	5													
28S	7					2	2	1						
28W	15	6	4	2										4
29E	26													
29N	22													
29S	8													
29W	43					3	3	1	2		4			
2E	19	5	5		4	4	3	2	2		1	1		
2N	9													
2S	6													1

LOT/BLOCK-FACE NUMBER	AVAILABLE SPACES	HOURLY ILLEGAL PARKING ACCUMULATION 5:30 am	6:30 am	7:30 am	8:30 am	9:30 am	10:30 am	11:30 am	12:30 pm	1:30 pm	2:45 pm	3:30 pm	4:30 pm	5:30 pm
2W	19	4	4		2	2	2	3	4					
30E	22	3	2											
30N	8													
30S	9													
30W	59													
32E	0													
32N	0													
32S	0													
32W	0													
33E	45													
33N	8													
33S	9													
33W	38													
34E	13													
34N	9													
34S	8													
34W	14													
35E	12													
35N	20													
35S	8													
35W	13													
36E	14	4												
36N	21													
36S	0													
36W	16													
37E1	18													
37E2	23													
37E3	30													
3E	19													
3N	7													
3W	20	2	2		1	1	1	1	2					
40N	5													
4E	17	10	5		6	7	7	5	5		2	1		2
4N	7	1						1	1		1	1		1
4S	8	3	2		2	1	1				1			1
4W	17	2	1		1	3	2		1					1
5N	6													
5S	5	2	2		1	1	1	5	2		2	1		
5W	16	2	2		4	2	4	3	4		1	1	1	1
7E	20	4												
7N	10			1										
7S	9	1												
7W	15	7		1										
8N	5	2												
8S	8													
8W	16	2	2	2	1	1		2	1					1
Total Beyond 2 Blocks	1283	92	51	13	31	34	36	34	33	15	23	14	20	24
GRAND TOTAL	2181	135	77	24	65	72	73	71	62	32	53	37	28	35

TABLE A-1.4
OCCUPANCY FOR EAST MISSION NEIGHBORHOOD

SF6HMC MASTER PLAN UPDATE — MISSION NEIGHBORHOOD ON-STREET PARKING SURVEY (8/20/87) — 09/17/87

LOT/BLOCK-FACE NUMBER	AVAILABLE SPACES	HOURLY PARKING ACCUMULATION 5:30 am	6:30 am	7:30 am	8:30 am	9:30 am	10:30 am	11:30 am	12:30 pm	1:30 pm	2:45 pm	3:30 pm	4:30 pm	5:30 pm
1N	7	4	5	5	5	5	5	5	5	5	5	5	5	7
1E	26	22	21	18	16	15	11	7	7	13	20	18	17	18
1S	7	4	4	4	4	4	4	4	4	4	4	5	5	6
1W	13	12	9	9	10	9	6	7	4	9	13	13	13	13
2N	9	8	9	7	6	5	7	9	7	7	6	5	9	8
2E	19	18	18	18	18	18	19	19	19	17	16	16	17	17
2S	6	6	6	6	6	6	6	6	6	6	6	5	5	6
2W	19	18	17	17	17	19	19	19	11	15	19	16	17	18
3N	7	7	7	7	7	7	7	6	7	7	7	7	7	6
3E	19	15	15	15	16	14	14	16	18	18	18	16	10	12
3S	6	5	6	6	6	6	6	6	6	6	6	6	6	6
3W	20	20	16	14	12	16	15	9	6	11	17	18	18	18
4N	7	7	4	1	1	6	6	7	7	7	7	7	6	7
4E	17	17	17	16	15	15	11	8	7	10	13	16	17	17
4S	8	6	6	4	1	2	4	7	6	7	8	7	8	8
4W	17	16	13	14	14	13	10	8	17	16	15	14	16	16
5N	6	5	4	3	2	4	4	5	4	3	3	4	4	6
5E	21	19	17	17	18	18	17	17	18	18	19	18	19	20
5S	5	2	2	1	0	2	4	4	3	4	4	3	4	4
5W	16	16	15	15	15	16	16	16	13	13	12	12	14	14
6N	6	4	3	2	1	6	6	6	6	6	6	6	5	5
6E	10	9	9	10	9	9	10	9	10	10	10	9	7	10
6S	6	4	3	3	2	2	2	3	2	3	4	4	4	4
6W	14	14	11	11	12	14	14	10	9	12	14	14	14	14
7N	10	10	10	10	10	10	9	9	9	9	10	10	9	8
7E	20	20	17	18	16	16	16	9	10	11	12	15	18	20
7S	9	9	9	9	8	8	8	8	8	8	9	9	8	5
7W	15	15	15	15	11	4	10	8	6	7	12	10	10	10
8N	5	5	4	4	3	3	2	1	4	3	4	4	4	4
8E	14	14	14	14	14	14	14	14	12	14	13	13	13	13
8S	8	8	7	7	7	8	7	7	7	7	7	7	6	7
8W	16	16	16	16	16	16	16	16	16	16	16	16	15	16
9N	6	3	3	3	3	3	4	4	4	5	6	6	5	6
9E	18	7	15	14	14	14	16	16	15	15	17	17	16	15
9S	10	9	8	10	8	10	1	10	10	10	10	10	9	10
9W	18	18	16	18	17	17	14	9	12	14	14	14	13	13
10N	5	5	2	3	2	1	1	1	2	4	4	4	4	4
10E	19	13	12	13	15	4	6	18	16	16	18	18	17	16
10S	8	0	0	0	4	4	4	6	3	5	4	5	6	6
10W	12	12	10	5	1	0	9	11	9	10	9	10	11	9
11N	7	7	5	4	2	0	6	7	7	6	6	6	7	7
11E	17	11	16	16	16	15	15	17	17	17	17	17	17	17
11S	10	0	1	2	5	2	4	7	5	5	5	5	5	7
11W	16	11	15	15	13	12	13	16	16	16	13	14	16	16
12N	6	6	5	5	2	1	1	4	5	5	5	5	4	5
12E	14	12	10	10	10	9	9	11	14	14	14	14	14	13
12S	8	1	0	2	7	5	5	5	6	6	5	6	4	2
12W	15	7	14	14	15	4	2	15	13	14	15	115	15	15
13N	6	2	3	3	3	3	4	6	6	3	5	5	5	5
13E	14	12	6	4	3	2	3	11	10	14	14	14	14	14
13S	0	--	--	--	--	--	--	--	--	--	--	--	--	--
13W	8	8	8	4	2	0	6	8	7	6	8	7	8	8
14N	10	6	3	2	5	8	7	8	9	7	8	8	7	7

LOT/BLOCK-FACE NUMBER	AVAILABLE SPACES	HOURLY PARKING ACCUMULATION 5:30 am	6:30 am	7:30 am	8:30 am	9:30 am	10:30 am	11:30 am	12:30 pm	1:30 pm	2:45 pm	3:30 pm	4:30 pm	5:30 pm
14E	15	15	15	15	15	15	15	14	15	15	14	15	15	12
14S	8	8	7	6	6	6	6	6	5	5	5	5	3	4
14W	19	17	14	16	17	18	19	19	19	17	13	18	19	19
15N	8	7	8	7	7	7	8	6	7	8	6	6	6	6
15E	11	7	8	8	8	9	11	9	10	10	10	9	8	9
15S	10	8	7	9	9	9	9	9	9	8	9	9	9	9
15W	18	16	15	8	6	4	9	11	16	18	15	17	16	16
16N	7	5	6	2	4	6	7	7	7	7	6	7	6	7
16E	15	15	15	15	15	15	14	15	15	15	15	13	11	11
16S	7	6	7	7	7	7	7	7	7	7	7	7	6	7
16W	14	11	9	12	12	12	13	13	12	11	12	12	9	10
17N	10	6	5	6	6	7	10	9	9	8	10	10	8	6
17E	13	13	13	13	13	13	12	12	11	12	12	6	9	9
17S	10	8	8	8	8	8	8	8	8	8	8	7	8	8
17W	15	15	14	15	15	15	15	15	14	14	11	12	6	7
18N	9	5	8	9	8	7	9	9	9	9	9	6	8	8
18W	4	3	4	2	2	2	2	2	1	1	1	0	0	0
19N	10	6	6	7	7	8	8	7	8	9	9	9	9	9
20N	6	6	6	6	6	6	6	6	6	6	6	6	6	5
20E	15	8	12	11	14	15	15	15	15	15	15	14	11	11
20S	2	2	2	2	2	2	2	2	2	2	2	2	2	2
20W	13	11	11	11	12	12	12	12	12	12	10	10	11	11
21N	7	2	5	5	6	6	7	7	5	6	5	5	4	4
21E	18	12	16	18	18	18	18	18	17	17	17	14	14	12
21S	6	6	6	6	6	6	5	6	4	6	6	6	4	3
21W	14	10	14	13	14	14	14	14	14	13	14	10	7	6
22N	5	3	4	4	5	5	5	5	5	5	5	5	5	4
22E	43	23	39	36	37	43	42	43	42	42	43	34	24	19
22S	7	7	7	7	7	7	7	7	7	7	7	7	5	4
22W	44	31	40	39	39	43	42	42	42	43	43	40	29	24
23N	5	5	5	5	5	5	5	5	5	5	5	5	5	5
23E	17	8	13	12	17	17	16	17	17	17	17	14	12	9
23S	7	4	5	5	7	7	7	7	7	6	6	5	5	7
23W	15	12	12	12	14	15	15	15	15	15	15	15	11	11
24N	18	17	16	17	18	18	18	18	17	18	18	17	15	11
24E	58	19	27	51	58	57	58	58	58	58	58	54	35	30
24S	18	18	18	18	18	18	18	18	18	18	18	15	13	12
24W	28	26	24	26	26	28	26	28	28	23	28	28	28	22
25E	24	6	6	22	24	24	24	23	24	24	24	19	17	9
25S	45	23	44	45	43	45	45	45	45	45	45	45	44	32
25W	34	22	23	34	34	34	34	34	34	34	34	34	30	19
38W1	26	9	11	20	23	26	26	25	26	26	26	25	18	14
38W2	72	19	19	67	70	69	69	72	69	72	72	64	47	39
39W	102	35	45	52	95	102	102	100	100	99	97	82	58	49
40N	5	3	4	4	5	5	5	5	5	5	4	4	4	5
Overpass N	11	5	7	10	11	10	11	10	8	10	11	11	10	8
Overpass S	11	6	8	11	11	11	11	11	11	11	11	10	7	6
TOTAL	1494	1034	1099	1197	1255	1260	1282	1321	1300	1341	1366	1296	1164	1093

LOT/BLOCK-FACE NUMBER	AVAILABLE SPACES	HOURLY PARKING UTILIZATION (percentage) 5:30 am	6:30 am	7:30 am	8:30 am	9:30 am	10:30 am	11:30 am	12:30 pm	1:30 pm	2:45 pm	3:30 pm	4:30 pm	5:30 pm
1N	7	57	71	71	71	71	71	71	71	71	71	71	71	100
1E	26	85	81	69	62	58	42	27	27	50	77	69	65	69
1S	7	57	57	57	57	57	57	57	57	57	57	71	71	86
1W	13	92	69	69	77	69	46	54	31	69	100	100	100	100
2N	9	89	100	78	67	56	78	100	78	78	67	56	100	89
2E	19	95	95	95	95	95	100	100	100	89	84	84	89	89
2S	6	100	100	100	100	100	100	100	100	100	100	83	83	100
2W	19	95	89	89	89	100	100	100	58	79	100	84	89	95
3N	7	100	100	100	100	100	100	86	100	100	100	100	100	86
3E	19	79	79	79	84	74	74	84	95	95	95	84	53	63
3S	6	83	100	100	100	100	100	100	100	100	100	100	100	100
3W	20	100	80	70	60	80	75	45	30	55	85	90	90	90
4N	7	100	57	14	14	86	86	100	100	100	100	100	86	100
4E	17	100	100	94	88	88	65	47	41	59	76	94	100	100
4S	8	75	75	50	13	25	50	88	75	88	100	88	100	100
4W	17	94	76	82	82	76	59	47	100	94	88	82	94	94
5N	6	83	67	50	33	67	67	83	67	50	50	67	67	100
5E	21	90	81	81	86	86	81	81	86	86	90	86	90	95
5S	5	40	40	20	0	40	80	80	60	80	80	60	80	80
5W	16	100	94	94	94	100	100	100	81	81	75	75	88	88
6N	6	67	50	33	17	100	100	100	100	100	100	100	83	83
6E	10	90	90	100	90	90	100	90	100	100	100	90	70	100
6S	6	67	50	50	33	33	33	50	33	50	67	67	67	67
6W	14	100	79	79	86	100	100	71	64	86	100	100	100	100
7N	10	100	100	100	100	100	90	90	90	90	100	100	90	80
7E	20	100	85	90	80	80	80	45	50	55	60	75	90	100
7S	9	100	100	100	89	89	89	89	89	89	100	100	89	56
7W	15	100	100	100	73	27	67	53	40	47	80	67	67	67
8N	5	100	80	80	60	60	40	20	80	60	80	80	80	80
8E	14	100	100	100	100	100	100	100	86	100	93	93	93	93
8S	8	100	88	88	88	100	88	88	88	88	88	88	75	88
8W	16	100	100	100	100	100	100	100	100	100	100	100	94	100
9N	6	50	50	50	50	50	67	67	67	83	100	100	83	100
9E	18	39	83	78	78	78	89	89	83	83	94	94	89	83
9S	10	90	80	100	80	100	10	100	100	100	100	100	90	100
9W	18	100	89	100	94	94	78	50	67	78	78	78	72	72
10N	5	100	40	60	40	20	20	20	40	80	80	80	80	80
10E	19	68	63	68	79	21	32	95	84	84	95	95	89	84
10S	8	0	0	0	50	50	50	75	38	63	50	63	75	75
10W	12	100	83	42	8	0	75	92	75	83	75	83	92	75
11N	7	100	71	57	29	0	86	100	100	86	86	86	100	100
11E	17	65	94	94	94	88	88	100	100	100	100	100	100	100
11S	10	0	10	20	50	20	40	70	50	50	50	50	50	70
11W	16	69	94	94	81	75	81	100	100	100	81	88	100	100
12N	6	100	83	83	33	17	17	67	83	83	83	83	67	83
12E	14	86	71	71	71	64	64	79	100	100	100	100	100	93
12S	8	13	0	25	88	63	63	63	75	75	63	75	50	25
12W	15	47	93	93	100	27	13	100	87	93	100	767	100	100
13N	6	33	50	50	50	50	67	100	100	50	83	83	83	83
13E	14	86	43	29	21	14	21	79	71	100	100	100	100	100
13S	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
13W	8	100	100	50	25	0	75	100	88	75	100	88	100	100
14N	10	60	30	20	50	80	70	80	90	70	80	80	70	70

TABLE A-1.5
PERCENTAGE OCCUPANCY FOR EAST MISSION NEIGHBORHOOD

LOT/BLOCK-FACE NUMBER	AVAILABLE SPACES	HOURLY PARKING UTILIZATION (percentage) 5:30 am	6:30 am	7:30 am	8:30 am	9:30 am	10:30 am	11:30 am	12:30 pm	1:30 pm	2:45 pm	3:30 pm	4:30 pm	5:30 pm
14E	15	100	100	100	100	100	100	93	100	100	93	100	100	100
14S	8	100	88	75	75	75	75	75	63	63	63	63	38	50
14W	19	89	74	84	89	95	100	100	100	89	68	95	100	100
15N	8	88	100	88	88	88	100	75	88	100	75	75	75	75
15E	11	64	73	73	73	82	100	82	91	91	91	82	73	82
15S	10	80	70	90	90	90	90	90	90	80	90	90	90	90
15W	18	89	83	44	33	22	50	61	89	100	83	94	89	89
16N	7	71	86	29	57	86	100	100	100	100	86	100	86	100
16E	15	100	100	100	100	100	93	100	100	100	100	67	73	73
16S	7	86	100	100	100	100	100	100	100	100	100	100	86	100
16W	14	79	64	86	86	86	93	93	86	79	86	86	64	71
17N	10	60	50	60	60	70	100	90	90	80	100	100	80	80
17E	13	100	100	100	100	100	92	92	85	92	92	46	69	69
17S	10	80	80	80	80	80	80	80	80	80	80	70	80	80
17W	15	100	93	100	100	100	100	100	93	93	73	80	40	47
18N	9	56	89	100	89	78	100	100	100	100	100	67	89	89
18W	4	75	100	50	50	50	50	50	25	25	25	0	0	0
19N	10	60	60	70	70	80	80	70	80	90	90	90	90	90
20N	6	100	100	100	100	100	100	100	100	100	100	100	100	83
20E	15	53	80	73	93	100	100	100	100	100	100	93	73	73
20S	2	100	100	100	100	100	100	100	100	100	100	100	100	100
20W	13	85	85	85	92	92	92	92	92	92	77	77	85	85
21N	7	29	71	71	86	86	100	100	71	86	71	71	57	57
21E	18	67	89	100	100	100	100	100	94	94	94	78	78	67
21S	6	100	100	100	100	100	83	100	67	100	100	100	67	50
21W	14	71	100	93	100	100	100	100	100	93	100	71	50	43
22N	5	60	80	80	100	100	100	100	100	100	100	100	100	80
22E	43	53	91	84	86	100	98	100	98	98	100	79	56	44
22S	7	100	100	100	100	100	100	100	100	100	100	100	71	57
22W	44	70	91	89	89	98	95	95	95	98	98	91	66	55
23N	5	100	100	100	100	100	100	100	100	100	100	100	100	100
23E	17	47	76	71	100	100	94	100	100	100	100	82	71	53
23S	7	57	71	71	100	100	100	100	100	86	86	71	71	100
23W	15	80	80	80	93	100	100	100	100	100	100	100	73	73
24N	18	94	89	94	100	100	100	100	94	100	100	94	83	61
24E	58	33	47	88	100	98	100	100	100	100	100	93	60	52
24S	18	100	100	100	100	100	100	100	100	100	100	83	72	67
24W	28	93	86	93	93	100	93	100	100	100	100	100	100	79
25E	24	25	25	92	100	100	100	96	100	100	100	79	71	38
25S	45	51	98	100	96	100	100	100	100	100	100	100	98	71
25W	34	65	68	100	100	100	100	100	100	100	100	100	88	56
38W1	26	35	42	77	88	100	100	96	100	100	100	96	69	54
38W2	72	26	26	93	97	96	96	100	96	100	100	89	65	54
39W	102	34	44	51	93	100	100	98	98	97	95	80	57	48
40N	5	60	80	80	100	100	100	100	100	100	80	80	80	100
Overpass N	11	45	64	91	100	91	100	91	73	91	100	100	91	73
Overpass S	11	55	73	100	100	100	100	100	100	100	100	91	64	55
TOT...	1494	69	74	80	84	84	86	88	87	90	91	93	78	72

TABLE A-1.6
OCCUPANCY FOR POTRERO HILL ZONE

SF6HMC MASTER PLAN UPDATE — PORTRERO HILL NEIGHBORHOOD ON-STREET PARKING SURVEY (8/20/87) — 09/17/87

LOT/BLOCK-FACE NUMBER	AVAILABLE SPACES	HOURLY ACCUMULATION 5:30 am	6:30 am	7:30 am	8:30 am	9:30 am	10:30 am	11:30 am	12:30 pm	1:30 pm	2:45 pm	3:30 pm	4:30 pm	5:30 pm
26N	7	0	1	0	0	0	0	1	0	0	1	1	2	2
26E	14	11	8	6	4	6	6	8	9	8	8	8	6	10
26S	17	3	3	3	2	2	2	1	1	1	2	2	2	2
27N	6	0	0	0	0	0	0	0	0	0	1	1	1	1
27E	22	22	22	17	17	21	19	18	22	22	22	22	22	22
27S	5	11	11	12	23	24	24	24	24	22	21	21	21	22
27W	5	5	5	5	4	4	4	4	4	2	4	4	5	5
28N	5	5	5	3	4	3	4	3	2	2	1	3	2	4
28E	25	25	23	15	19	16	18	15	18	17	13	13	18	18
28S	7	2	2	3	4	7	7	7	7	7	7	7	5	2
28W	15	15	15	15	14	12	11	11	8	4	6	7	12	15
29N	22	8	6	9	16	20	21	20	19	20	18	18	9	5
29E	26	15	14	11	14	23	23	21	20	20	22	22	19	16
29S	8	6	3	7	8	8	8	8	8	8	8	8	8	8
29W	43	32	28	26	42	43	43	43	43	43	43	43	43	43
30N	8	3	3	3	3	1	1	1	1	1	1	1	1	1
30E	22	22	22	21	15	16	14	13	14	15	15	16	18	21
30S	9	5	5	5	6	7	7	7	5	6	8	8	8	8
30W	59	50	49	41	42	49	45	48	47	48	45	45	45	38
31E1	0	NO PARKING ANY TIME												
31E2	43	21	20	32	43	43	43	41	42	37	31	34	36	36
32N	0	CONSTRUCTION												
32E	0	CONSTRUCTION												
32S	0	CONSTRUCTION												
32W	0	CONSTRUCTION												
33N	8	3	3	3	3	7	7	7	7	7	7	6	5	4
33E	45	28	26	27	21	21	16	18	16	21	21	20	19	19
33S	9	4	4	4	3	3	3	2	2	2	1	1	1	1
33W	38	32	29	30	32	33	35	36	35	36	37	38	28	25
34N	9	4	4	4	8	9	9	9	7	9	7	7	6	6
34E	13	12	9	9	9	8	9	7	10	11	8	9	7	10
34S	8	3	3	3	3	3	4	3	3	3	4	4	5	4
34W	14	11	11	9	12	12	12	10	12	12	13	12	9	11
35N	20	13	17	13	8	12	12	11	13	12	10	11	11	7
35E	12	11	10	10	4	5	6	7	7	4	4	3	3	5
35S	8	5	5	5	3	4	3	3	3	3	2	2	1	2
35W	13	11	11	9	11	11	11	10	7	9	7	8	5	8
36N	21	16	16	13	10	12	15	10	10	9	9	8	12	13
36E	14	14	8	7	5	5	5	4	4	4	3	3	10	10
36S	0	NO PARKING ANY TIME												
36W	16	7	7	5	5	8	8	6	8	8	8	7	11	8
37E1	18	16	16	18	18	16	18	18	18	18	18	18	10	9
37E2	23	13	13	17	19	20	20	20	19	19	19	19	14	11
37E3	30	11	11	11	14	16	17	17	10	11	10	8	6	5
TOTAL	687	475	448	431	468	512	510	492	485	481	465	468	446	437

TABLE A-1.7
PERCENTAGE OCCUPANCY FOR POTRERO HILL ZONE

SFGHMC MASTER PLAN UPDATE — PORTRERO HILL NEIGHBORHOOD ON-STREET PARKING SURVEY (8/20/87) — (9/17/87

LOT/BLOCK-FACE NUMBER	AVAILABLE SPACES	HOURLY UTILIZATION (percent) 5:30 am	6:30 am	7:30 am	8:30 am	9:30 am	10:30 am	11:30 am	12:30 pm	1:30 pm	2:45 pm	3:30 pm	4:30 pm	5:30 pm
26N	7	0	14	0	0	0	0	14	0	0	14	14	29	29
26E	14	79	57	43	29	43	43	57	64	57	57	57	43	71
26S	17	18	18	18	12	12	12	6	6	6	12	12	12	12
27N	6	0	0	0	0	0	0	0	0	0	17	17	17	17
27E	22	100	100	77	77	95	86	82	100	100	100	100	100	100
27S	5	220	220	240	460	480	480	480	480	440	420	420	420	440
27W	5	100	100	100	80	80	80	80	80	40	80	80	100	100
28N	5	100	100	60	80	60	80	60	40	40	20	60	40	80
28E	25	100	92	60	76	64	72	60	72	68	52	52	72	72
28S	7	29	29	43	57	100	100	100	100	100	100	100	71	29
28W	15	100	100	100	93	80	73	73	53	27	40	47	80	100
29N	22	36	27	41	73	91	95	91	86	91	82	82	41	23
29E	26	58	54	42	54	88	88	81	77	77	85	85	73	62
29S	8	75	38	88	100	100	100	100	100	100	100	100	100	100
29W	43	74	65	60	98	100	100	100	100	100	100	100	100	100
30N	8	38	38	38	38	13	13	13	13	13	13	13	13	13
30E	22	100	100	95	68	73	64	59	64	68	68	73	82	95
30S	9	56	56	56	67	78	78	78	56	67	89	89	89	89
30W	59	85	83	69	71	83	76	81	80	81	76	76	76	64
31E1	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
31E2	43	49	47	74	100	100	100	95	98	86	72	79	84	84
32N	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
32E	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
32S	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
32W	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
33N	8	38	38	38	38	88	88	88	88	88	88	75	63	50
33E	45	62	58	60	47	47	36	40	36	47	47	44	42	42
33S	9	44	44	44	33	33	33	22	22	22	11	11	11	11
33W	38	84	76	79	84	87	92	95	92	95	97	100	74	66
34N	9	44	44	44	89	100	100	100	78	100	78	78	67	67
34E	13	92	69	69	69	62	69	54	77	85	62	69	54	77
34S	8	38	38	38	38	38	50	38	38	38	50	50	63	50
34W	14	79	79	64	86	86	86	71	86	86	93	86	64	79
35N	20	65	85	65	40	60	60	55	65	60	50	55	55	35
35E	12	92	83	83	33	42	50	58	58	33	33	25	25	42
35S	8	63	63	63	38	50	38	38	38	38	25	25	13	25
35W	13	85	85	69	85	85	85	77	54	69	54	62	38	62
36N	21	76	76	62	48	57	71	48	48	43	43	38	57	62
36E	14	100	57	50	36	36	36	29	29	29	21	21	71	71
36S	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
36W	16	44	44	31	31	50	50	38	50	50	50	44	69	50
37E1	18	89	89	100	100	100	100	100	100	100	100	100	56	50
37E2	23	57	57	74	83	87	87	87	83	83	83	83	61	48
37E3	30	37	37	37	47	53	57	57	33	37	33	27	20	17
TOTAL	687	69	65	63	68	75	74	72	71	70	69	68	65	64

TABLE A1.8 -- DURATION BY RADIUS FROM HOSPITAL

DURATION	Within 1 Block	1 -2 Blocks	3 or more Blocks
1 hour	17.6%	36.9%	39.2%
2 hours	12.8%	16.3%	16.7%
3 hours	9.6%	11.6%	9.8%
4 hours	9.6%	5.7%	5.2%
5 hours	8.0%	2.5%	4.3%
6 hours	5.6%	4.0%	3.5%
7 hours	6.4%	2.7%	2.3%
8 hours	7.2%	2.2%	2.5%
9 hours	3.2%	3.2%	1.5%
10 hours	9.6%	1.0%	0.8%
11 hours	0.8%	0.5%	0.1%
12+ hours	9.6%	13.4%	14.1%
8 HOURS OR MORE	20.8%	20.3%	19.0%
4 HOURS OR MORE	50.4%	35.2%	34.3%
1 -2 HOURS	30.4%	53.2%	55.9%
AVERAGE	5.4 hours	4.0 hours	3.9 hours
SAMPLE SIZE	125	404	882

TABLE A1.9 -- DURATION BY NEIGHBORHOOD

DURATION	Mission	Potrero Hill
1 hour	39.3%	21.8%
2 hours	16.0%	17.3%
3 hours	10.8%	7.7%
4 hours	5.8%	5.5%
5 hours	3.8%	5.9%
6 hours	3.4%	6.4%
7 hours	2.9%	2.3%
8 hours	2.2%	6.8%
9 hours	1.9%	3.2%
10 hours	1.8%	0.9%
11 hours	0.3%	0.0%
12+ hours	11.8%	22.2%
8 HOURS OR MORE	18.0%	33.1%
4 HOURS OR MORE	33.9%	53.2%
1 -2 HOURS	55.3%	39.1%
AVERAGE	3.8 hours	5.4 hours
SAMPLE SIZE	1191	220

TABLE A-1.10
MAXIMUM POSSIBLE NON-RESIDENTIAL PARKING DEMAND DURING THE DAY

BLOCK	AVAILABLE	PEAK DEMAND
21N	7	6
22N	5	4
23N	5	2
24E	58	46
24N	18	13
24S	18	13
24W	28	20
25S	45	45
38W1	26	21
38W2	72	65
9E	18	16
Total within 1 Block	300	251
11E	17	10
12E	14	6
12N	6	4
12S	8	6
12W	15	14
15N	8	4
16N	7	7
17N	10	10
20N	6	4
21E	18	5
21S	6	5
21W	14	11
22E	43	34
22S	7	6
22W	44	8
23E	17	15
23S	7	6
23W	15	6
25E	24	22
25W	34	20
31N2	43	39
39W	102	82
3S	6	4
5E	21	11
6E	10	5
6N	6	5
6S	6	4
6W	14	13
8E	14	10
9N	6	1
9S	10	5
9W	18	11
Overpass N	11	11
Overpass S	11	11
Total 1 - 2 Blocks	598	415

MAXIMUM POSSIBLE NON-RESIDENTIAL PARKING DEMAND DURING THE DAY

BLOCK	AVAILABLE	PEAK DEMAND
10E	19	19
10N	5	3
10S	8	6
10W	12	10
11N	7	7
11S	10	7
11W	16	13
13E	14	15
13N	6	6
13S	0	0
13W	8	9
14E	15	8
14N	10	9
14S	8	1
14W	19	11
15E	11	9
15S	10	4
15W	18	18
16E	15	14
16S	7	4
16W	14	10
17E	13	13
17S	10	2
17W	15	15
18N	9	6
18W	4	2
19N	10	8
1E	26	23
1N	7	5
1S	7	1
1W	13	13
20E	15	12
20S	2	3
20W	13	13
26E	14	5
26N	7	1
26S	17	2
27E	22	2
27N	6	0
27S	5	0
27W	5	7
28E	25	8
28N	5	4
28S	7	7
28W	15	6
29E	26	23
29N	22	18
29S	8	8
29W	43	30
2E	19	2
2N	9	6

MAXIMUM POSSIBLE NON-RESIDENTIAL PARKING DEMAND DURING THE DAY

BLOCK	AVAILABLE	PEAK DEMAND
2S	6	3
2W	19	15
30E	22	2
30N	8	0
30S	9	8
30W	59	24
33E	45	9
33N	8	6
33S	9	2
33W	38	23
34E	13	9
34N	9	5
34S	8	2
34W	14	10
35E	12	6
35N	20	18
35S	8	3
35W	13	8
36E	14	4
36N	21	17
36W	16	2
37E1	18	7
37E2	23	18
37E3	30	18
3E	19	18
3N	7	3
3W	20	20
40N	5	3
4E	17	8
4N	6	5
4S	8	8
4W	17	10
5N	6	4
5S	5	4
5W	16	10
7E	20	16
7N	10	3
7S	9	2
7W	15	15
8N	5	3
8S	8	4
8W	16	10
Total Beyond 2 Blocks	1282	793
GRAND TOTAL	2180	1459

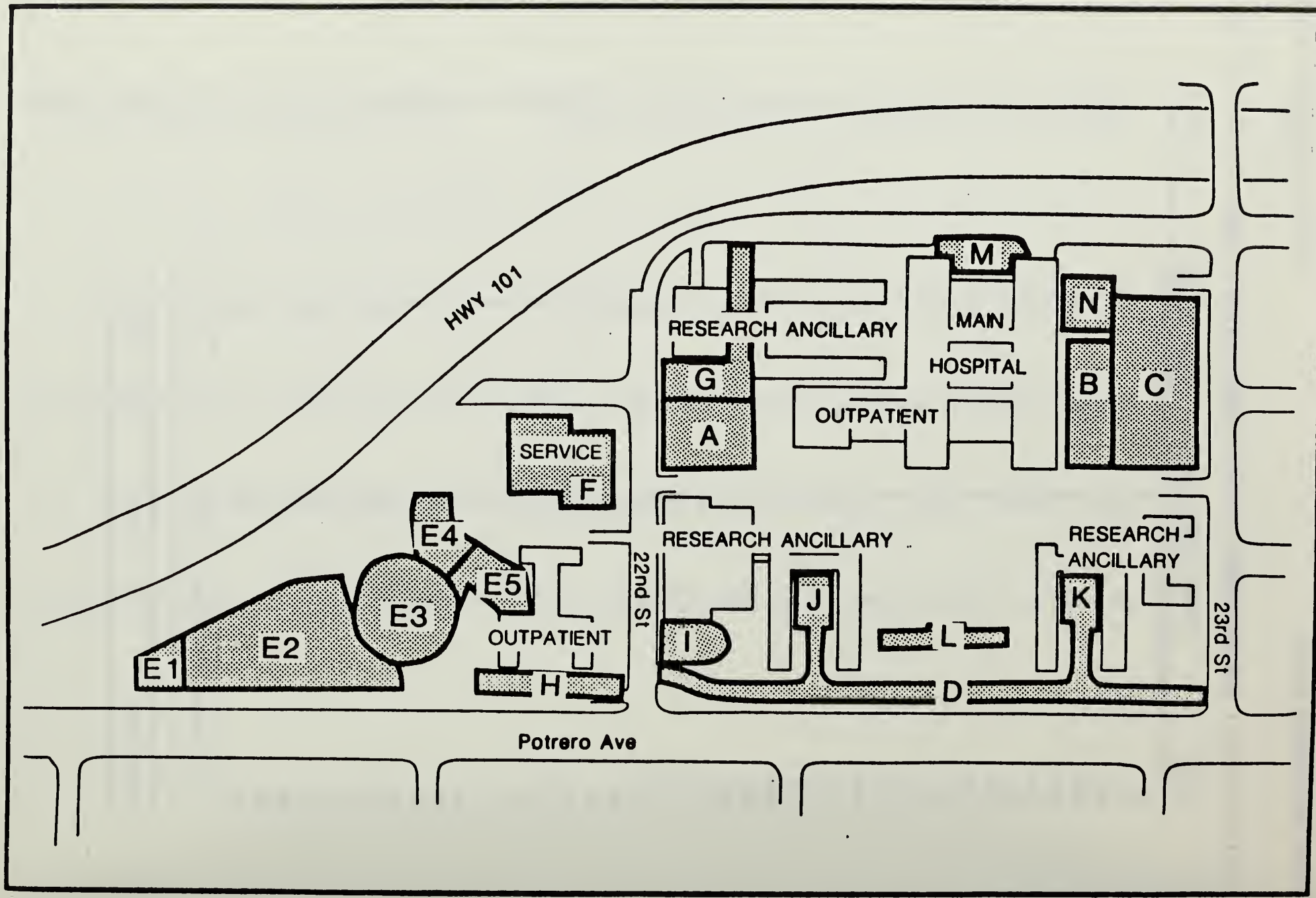

HWY 101
M
N
MAIN
HOSPITAL
RESEARCH ANCILLARY
G
A
B
C
OUTPATIENT
SERVICE
F
E4
E5
E3
E2
E1
OUTPATIENT
H
22nd St
RESEARCH ANCILLARY
RESEARCH
ANCILLARY
J
K
I
L
D
23rd St
Potrero Ave

Figure A-4

TABLE A2.1

ON-SITE PARKING INVENTORY AND SUMMARY OF RESTRICTIONS

Designation	Use	Size	Restrictions and Notes
A	Permit Lot (Red)	45	Includes 2 Handicap Stalls
B	Reserved	44	Includes: 34 Volunteer Physician 6 Sheriff's Dept. 4 Other reserves
C	Patient and Visitor	112	NO EMPLOYEES - 8 am to 5 pm Two Hour Limit
D	Fire Lane	0	
E1	Zone E	30	
E2	Zone E	92	
E3	Zone E	62	
E4	Zone E	21	
E5	Zone E	15	Reserved for Court Function Self-Regulated Stack Parking
F	Permit (Orange)	36	
G	Reserved	18	Includes : 18 Named Spaces 4 Kidney Patient
H	Fire Lane	0	
I	Permit (Red)	18	Self-Regulated Stack Parking
J	Reserved	32	All named spaces
K	Permit (Red)	26	
L	Permit (Red)	12	
M	Service Reserve	13	
N	Emergency Reserve	8	Includes : 2 Ambulance 6 ER Staff

TABLE A-2.2
ON-SITE PARKING OCCUPANCY

EFGHMC MASTER PLAN UPDATE — ON-SITE OCCUPANCY SURVEY (8/20/67)

LOT	DESIGNATION/USE	PARKING SPACES MARKED	PARKING SPACES USED	HOURLY PARKING ACCUMULATION 5:30 am	6:30 am	7:30 am	8:30 am	9:30 am	10:30 am	11:30 am	12:30 pm	1:30 pm	2:45 pm	3:30 pm	4:30 pm	5:30 p
A	Permit Lot (Zone A)	44	47	34	40	41	42	41	44	42	41	47	44	40	39	3
B	Volunteer Physicians	53	56	15	20	23	40	53	49	49	54	55	56	54	35	3
C	Patients/Visitors	112	120	71	81	84	112	112	112	112	115	117	120	115	106	10
D	Along Potrero	0	101	40	87	98	100	101	99	90	93	91	90	82	54	4
E1	Permit Lot (Zone E)	30	34	0	1	31	33	33	33	28	34	30	27	24	9	
E2	Permit Lot (Zone E)	92	109	4	58	94	99	100	100	101	109	91	95	88	42	2
E3	Permit Lot (Zone E)	62	77	7	62	67	67	67	68	65	77	68	70	73	27	1
E4	Permit Lot (Zone E)	21	23	1	3	19	23	23	23	23	23	22	23	23	9	
E5	Permit Lot (80/90)	15	18	5	5	13	13	14	14	14	18	13	14	12	7	
F	Service Building	36	49	14	16	29	43	43	43	45	49	47	46	40	27	1
G	Permit Lot (Zone L)	18	22	6	7	8	18	17	19	15	17	20	22	20	18	1
H	Along Potrero (80/90)	0	41	25	29	33	41	41	39	37	40	38	24	20	18	1
I		18	22	0	6	22	21	21	21	19	20	22	20	19	1	
J	Doctors Reserve	32	36	1	16	29	35	35	36	30	34	33	23	25	16	1
K		26	29	1	12	21	24	24	25	25	29	27	24	25	15	1
L	Front Gate Loop	12	13	8	11	13	13	13	13	13	13	10	10	9	6	
M	Service Reserve	13	15	5	7	10	12	10	11	10	15	13	12	8	6	
N	Emergency Reserve															
TOTAL		584	812	237	461	635	736	748	749	718	781	735	720	677	435	35
PARKERS NOT IN MARKED STALLS				65	116	144	172	174	173	152	201	156	154	126	72	5

TABLE A-2.3
ON-SITE PARKING PERCENTAGE OCCUPANCY

LOT	DESIGNATION/USE	PARKING SPACES MARKED	USED	PERCENT HOURLY ACCUMULATION 5:30 am	6:30 am	7:30 am	8:30 am	9:30 am	10:30 am	11:30 am	12:30 pm	1:30 pm	2:45 pm	3:30 pm	4:30 pm	5:30 pm
A	Permit Lot (Zone A)	44	47	77	91	93	95	93	100	95	93	107	100	91	89	77
B	Volunteer Physicians	53	56	28	38	43	75	100	92	92	102	104	106	102	66	74
C	Patients/Visitors	112	120	63	72	75	100	100	100	100	103	104	107	103	95	96
D	Along Potrero	0	101	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E1	Permit Lot (Zone E)	30	34	0	3	103	110	110	110	93	113	100	90	80	30	7
E2	Permit Lot (Zone E)	92	109	4	63	102	108	109	109	110	118	99	103	96	46	26
E3	Permit Lot (Zone E)	62	77	11	100	108	108	108	110	105	124	110	113	116	44	29
E4	Permit Lot (Zone E)	21	23	5	14	90	110	110	110	110	110	110	110	110	43	29
E5	Permit Lot (80/90)	15	18	33	33	87	87	93	93	93	120	87	93	80	47	40
F	Service Building	36	49	39	44	81	119	119	119	125	136	131	128	111	75	36
G	Permit Lot (Zone L)	18	22	33	39	44	100	94	106	83	94	111	122	111	100	61
H	Along Potrero (80/90)	0	41	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
I		18	22	0	33	122	117	117	117	106	111	122	111	106	6	0
J	Doctors Reserve	32	36	3	50	91	109	109	113	94	106	103	72	78	59	38
K		26	29	4	46	81	92	92	96	96	112	104	92	96	58	42
L	Front Gate Loop	12	13	67	92	108	108	108	108	108	108	83	83	75	50	58
M	Service Reserve	13	15	38	54	77	92	77	85	77	115	100	92	62	46	31
N	Emergency Reserve															
TOTAL		584	812	41	79	109	126	126	128	123	134	126	123	116	74	61

TABLE A-2.4
ON-SITE PARKING DURATION

LOT	DESIGNATION/USE	AVAILABLE SPACES	PARKING DURATION (hours) 1	2	3	4	5	6	7	8	9	11+	BEGINNERS*
A	Permit Lot (Zone A)	44	1				2					2	8
B	Volunteer Physicians	53	6	4	1		1		1	2			6
C	Patients/Visitors	112	7	1	3	3	1						10
D	Along Potrero	0	2		4		3	1				3	7
E1	Permit Lot (Zone E)	30		3									10
E2	Permit Lot (Zone E)	92								1		1	9
E3	Permit Lot (Zone E)	62									1	2	8
E4	Permit Lot (Zone E)	21								1		2	7
E5	Permit Lot (60/90)	15	2		4							2	7
F	Service Building	35										2	8
G	Permit Lot (Zone L)	18	5		2	3	1	1			2	1	3
H	Along Potrero (80/90)	0		1	1		1			1		1	9
I		18											10
J	Doctors Reserve	32		1	6		1						8
K		26		1	1					1	1	2	5
L	Front Gate Loop	12						1				3	7
M	Service Reserve												
N	Emergency Reserve												
TOTAL		694	23	11	22	6	10	3	1	6	4	21	122

*Beginners = Surveyed vehicles which were parked before survey began
*Enders = Surveyed vehicles which remained parked after end of survey

APPENDIX B

VISITOR SURVEY

VISITOR SURVEY

A visitor survey at the San Francisco General Hospital was conducted by DKS Associates in August of 1987. A visitor was defined as all individuals not employed at the hospital. The survey were distributed and collected by survey staff at several locations throughout the hospital, including:

- Main Lobby
- Emergency Room
- SurgiCenter
- Pharmacy
- AIDS Clinic
- Ward 86
- CEMOSH
- Labs
- Sales Representative Check-In

The visitor survey was designed to provide information regarding the purpose and duration of visits to the hospital, trip origins, travel modes and parking locations, if applicable. A copy of the survey form is displayed in Figure B1.

The visitor surveys identified several important characteristics of visitors to San Francisco General Hospital. These characteristics are briefly summarized below:

- Approximately seventy-two percent of all visitors to the hospital have clinic appointments, emergency room patients, or are checking into the hospital. The pharmacy attracted an additional six percent of all visitors. About nine percent of all visitors were visiting a patient and another four percent were dropping of a patient. Individuals on a business trip associated with the hospital made up approximately five percent and visits to labs and/or research projects made up two percent of the total.

- Forty-six percent of the visitors surveyed arrived at the hospital by private, motorized vehicle. Public transit was the mode of arrival for thirty-six percent of the visitors. Vanpools or the UCSF shuttle was used by another six percent of the visitors. Four percent of the visitors arrived by taxi. The remaining eight percent of the visitors walked to the hospital.

- Ninety-three percent of the visitors were in the San Francisco area prior to traveling to San Francisco General Hospital.

- Of the individuals that arrived by private vehicle, twenty-six percent were dropped off and thirty-one percent parked on the hospital site. The remaining forty-three percent parked on the surrounding streets.

- Eighty-five percent of the visitors parking on the street were able to park within a four block radius of San Francisco General Hospital.

SAN FRANCISCO GENERAL HOSPITAL VISITOR PARKING AND TRANSPORTATION SURVEY

San Francisco General Hospital is doing a survey of parking and transportation needs. Please help us by answering these questions. Your answers will help to improve parking and traffic at the hospital. Please return this form to the person who handed it to you after you have finished.

Thank you very much!

1. Why are you here today? (check one only)

a. [ ] Clinic Appointment
b. [ ] Check in to Hospital
c. [ ] Use Emergency Room
d. [ ] Use Pharmacy
e. [ ] Visit a Patient
f. [ ] Business Visit
g. [ ] Visit Lab or Research Project
h. [ ] Other (please give purpose)

_____

2. How long do you expect to be here? (check one only)

a. [ ] One-half hour
b. [ ] About one hour
c. [ ] Two or Three Hours
d. [ ] Four Hours or Longer

3. Where were you just before coming to the hospital? (check one only)

San Francisco Neighborhoods:

a. [ ] Mission District
b. [ ] Bayview/Hunters Point
c. [ ] Chinatown
d. [ ] Potrero Hill
e. [ ] Tenderloin
f. [ ] Western Addition/Fillmore
g. [ ] South of Market Street
h. [ ] Downtown/North Beach/ Telegraph, Russian, or Nob Hills
i. [ ] Bernal Heights/Outer Mission District
j. [ ] Twin Peaks/Noe Valley/ Haight/Castro Street
k. [ ] Oceanview/Merced/ Ingleside (OMI)
l. [ ] Sunset/West of Twin Peaks
m. [ ] Richmond/Sea Cliff
n. [ ] Marina/Cow Hollow
o. [ ] Pacific, Laurel Heights

Bay Area:

p. [ ] East Bay or further East
q. [ ] Peninsula or further South
r. [ ] Marin Co. or further North

4. How did you arrive at the hospital today? (check all that apply)

a. [ ] Private Car
b. [ ] Taxi
c. [ ] Van or Minibus
d. [ ] UCSF Shuttle Bus
e. [ ] SF MUNI Bus (which routes?)

_____

f. [ ] SamTrans Bus
g. [ ] BART Train
h. [ ] CalTrain Peninsula Commuter Train
i. [ ] AC Transit Bus
j. [ ] Golden Gate Transit Bus or Ferry
k. [ ] Motorcycle
l. [ ] Bicycle
m. [ ] Walked (all the way)
n. [ ] Other (how?)

_____

5. If you arrived by car... (check one only)

a. [ ] I was dropped off, the car was not parked
b. [ ] The car was parked in a hospital parking lot
c. [ ] The car was parked on the street

6. If the car was parked on the street...

What street was the car parked on? _____
How many blocks from the hospital was the car parked? _____

TABLE B.1 -- TABULATION OF VISITOR DATABASE, TRIP PURPOSE

NO.	PERCENT	RESPONSE
224	60.54%	A - Clinic Appointment
4	1.08%	B - Check in to Hospital
39	10.54%	C - Use Emergency Room
22	5.95%	D - Use Pharmacy
33	8.92%	E - Visit a Patient
18	4.86%	F - Business Visit
8	2.16%	G - Visit Lab or Research Project
9	2.43%	H - Other
13	3.51%	I - Drop Off Patient
370		Number of Responses

TABLE B.2 -- TABULATION OF VISITOR DATABASE, VISIT DURATIONS

(Expected Length of Visit)

NO.	PERCENT	RESPONSE
64	17.63%	A - One-half hour
112	30.85%	B - About one hour
139	38.29%	C - Two or three hours
48	13.22%	D - Four hours or longer
363		Number of Responses

TABLE B.3 -- TABULATION OF VISITOR DATABASE, TRIP ORIGIN

(Where Visitors Came From)

NO.	PERCENT	RESPONSE
95	26.46%	A - Mission District
33	9.19%	B - Bayview/Hunters Point
4	1.11%	C - Chinatown
15	4.18%	D - Potrero Hill
22	6.13%	E - Tenderloin
24	6.69%	F - Western Addition/Fillmore
21	5.85%	G - South of Market
29	8.08%	H - Downtown/North Beach/Telegraph, Russian, or Nob Hills
13	3.62%	I - Bernal Heights/Outer Mission District
45	12.53%	J - Twin Peaks/Noe Valley/Haight/Castro Street
12	3.34%	K - Oceanview/Merced/Ingleside (OMI)
7	1.95%	L - Sunset/West of Twin Peaks
6	1.67%	M - Richmond/Seacliff
2	0.56%	N - Marina/Cow Hollow
8	2.23%	O - Pacific, Laurel Heights
10	2.79%	P - East Bay or further east
9	2.51%	Q - Peninsula or further south
4	1.11%	R - Marin Co. or further north
359	Number of Responses	

TABLE B.4 -- TABULATION OF VISITOR DATABASE, MODE OF ARRIVAL

NO.	Percent	Response
166	44.74%	A - Private Car
15	4.04%	B - Taxi
19	5.12%	C - Van or Minibus
2	0.54%	D - UCSF Shuttle Bus
129	34.77%	E - SF MUNI Bus
1	0.27%	F - SamTrans Bus
1	0.27%	G - BART Train
1	0.27%	H - CalTrain Peninsula Commuter Train
1	0.27%	I - AC Transit
1	0.27%	J - Golden Gate Transit Bus or Ferry
5	1.35%	K - Motorcycle
29	7.82%	M - Walked (all the way)
1	0.27%	N - Other
371	Number of Responses	

TABLE B.5 -- TABULATION OF VISITOR DATABASE, CAR FIELD

(Persons Who Arrived By Car)

NO.	Percent	Response
46	25.99%	A - I was dropped off, the car was not parked
55	31.07%	B - The car was parked in a hospital lot
76	42.94%	C - The car was parked on the street
177		Number of Responses

TABLE B.6 -- TABULATION OF VISITOR DATABASE, BLOCKS FIELD

(Distance Car Parked From Hospital)

NO.	Percent	Response
12	16.44%	1
23	31.51%	2
17	23.29%	3
10	13.70%	4
7	9.59%	5
2	2.74%	6
1	1.37%	7
1	1.37%	9
73		Number of Responses

TABLE B.7 -- CROSS-TABULATION OF VISITOR DATABASE

TRIP PURPOSE VERSUS LENGTH OF VISIT

PURPOSE OF VISIT	LENGTH OF VISIT			
	1/2 Hour	1 Hour	2 - 3 Hours	4+ Hours
Clinic Appointment	15.8%	34.2%	41.4%	8.6%
Check into Hospital	25.0%	50.0%	0.0%	25.0%
Emergency Room	8.1%	16.2%	43.3%	32.4%
Pharmacy	31.8%	50.0%	13.6%	4.6%
Visit Patient	18.8%	25.0%	43.7%	12.5%
Business	29.4%	29.4%	17.7%	23.5%
Visit Lab or Research Project	50.0%	12.5%	37.5%	23.5%
Drop Off Patient	0.0%	25.0%	41.7%	33.3%
Other	33.3%	0.0%	33.4%	33.3%

TABLE B.8 -- CROSS-TABULATION OF VISITOR DATABASE, PURPOSE OF VISIT VERSUS TRAVEL MODE

PURPOSE OF VISIT	TRAVEL MODE											
	Private Auto	Taxi	Van or Minibus	UCSF Shuttle	MUNI	SamTrans	BART	CalTrain	AC Transit	GG Transit	Motor-Cycle	Walk
Clinic Appointment	41.9%	4.9%	5.4%	0.5%	40.5%	0.5%					0.9%	5.4%
Check into Hospital	50.0%		25.0%									25.0%
Emergency Room	40.9%	2.6%	7.7%		33.3%			2.6%				10.3%
Pharmacy	28.6%		4.8%		52.3%						4.8%	9.5%
Visit Patient	60.5%	6.1%			18.2%						6.1%	9.1%
Business	55.5%			5.6%	22.2%							16.7%
Visit Lab or Research Project	62.5%		12.5%		12.5%		12.5%					
Drop Off Patient	53.8%	7.7%	7.7%		23.1%							11.1%
Other	66.7%								11.1%	11.1%		11.1%

TABLE B.9 -- CROSS-TABULATION OF VISITOR DATABASE, TRIP ORIGIN VERSUS TRAVEL MODE

PURPOSE OF VISIT	TRAVEL MODE												
	Private Auto	Taxi	Van or Minibus	UCSF Shuttle	MUNI	SamTrans	BART	CalTrain	AC Transit	GG Transit	Motor-Cycle	Walk	Other
Mission District	36.7%	4.2%	5.3%		30.5%			1.1%			1.1%	21.1%	
Bayview/Hunter's Point	57.6%	9.1%	3.0%		30.3%								
Chinatown	50.0%				50.0%								
Potrero Hill	33.3%		6.7%		53.3%							6.7%	
Tenderloin	13.6%	4.6%	9.1%		68.1%							4.6%	
Western Addition/Fillmore	33.3%	4.2%	8.3%		41.7%						4.2%	8.3%	
South of Market Street	38.0%	4.8%	4.8%		33.3%						4.8%	9.5%	
Downtown/North Beach/Telegraph, Russian, or Nob Hills	41.4%		6.9%		44.7%						3.5%	9.5%	4.8%
Bernal Heights/Outer Mission District	46.1%		7.7%		38.5%							7.7%	
Twin Peaks/Noe Valley/Haight/ Castro Street	53.4%	8.9%	4.4%		28.9%					2.2%	2.2%		
Oceanview/Merced/Ingleside (OMI)	67.7%				33.3%								
Sunset/West of Twin Peaks	57.1%			28.6%	14.3%								
Richmond/Sea Cliff	50.0%				33.3%	16.7%							
Marina/Cow Hollow	50.0%				50.0%								
Pacific, Laurel Heights	50.0%				50.0%								
East Bay or further East	60.0%		10.0%		10.0%		10.0%		10.0%				
Peninsula or further South	100.0%												
Marin County or further North	100.0%												

APPENDIX C

EMPLOYEE SURVEY

Employee Survey

The employee survey was a self-administered questionnaire which was distributed to all employees, both San Francisco and University of California at San Francisco, at the hospital. A copy of the survey form is shown on Page C-2.

The employee survey was designed to provide information regarding the job types, locations of residence, travel modes, work hours and parking locations, if applicable.

The survey identified several important characteristics of employees at the San Francisco General Hospital. These characteristics are summarized below:

- The majority of the people employed at the San Francisco General Hospital live in San Francisco.

- Approximately sixty-eight percent of the employees responding to the survey drove alone in a private automobile. Another twelve percent took public transit. About thirteen percent of the people who work at the hospital arrived at work in a carpool, vanpool or the UCSF shuttle. The remainder of the employees took alternate forms of transportation to work.

- Of the employees who drive to work, about half utilize their cars during one or more work days each week.

SAN FRANCISCO GENERAL HOSPITAL EMPLOYEE PARKING AND TRAVEL SURVEY

1. Which type of work most closely describes your job: (check one only)

a. [ ] Administrator/Management
b. [ ] Office Worker
c. [ ] Doctor
d. [ ] Nurse
e. [ ] Paramedical Staff
f. [ ] Service Staff (Housekeeping, Dietary Security, Maintenance, etc.)
g. [ ] Professor/Teacher
h. [ ] Lab Technician
i. [ ] Student
j. [ ] Volunteer
k. [ ] Other (specify) _____

2. What is the zip code of your residence: _____

3a. Check the boxes which describe the shifts you will work this week:

Hours Worked	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Sun.
8:00 AM – 5:00 PM	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
7:00 AM – 3:30 PM	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
3:00 PM – 11:30 PM	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
11:00 PM – 7:30 AM	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
7:00 AM – 7:00 PM	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
7:00 PM – 7:00 AM	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Other (specify hours)	_____	_____	_____	_____	_____	_____	_____

3b. Does your shift vary from week to week? [ ] Yes [ ] No

4. How do you usually travel to the hospital (at least three times per week)?

a. [ ] Dropped Off
b. [ ] Drive Alone
c. [ ] Carpool (total number of persons _____)
d. [ ] Vanpool (total number of persons _____)
e. [ ] Motorcycle
f. [ ] Bicycle
g. [ ] Walk (all the way)
h. [ ] UCSF Shuttle Bus
i. [ ] SF MUNI Bus (routes? _____)
j. [ ] SamTrans Bus
k. [ ] BART Train
l. [ ] CalTrain Peninsula Commuter Train
m. [ ] AC Transit Bus
n. [ ] Golden Gate Transit Bus or Ferry
o. [ ] Other (how? _____)

Please answer the following questions if you drive to the hospital by car...

5. Where do you usually park? Specify a location frequently used by block, for example, "Potrero between 22nd and 23rd". If you move your car during your shift, indicate where you park when you first arrive.

a. [ ] Surface Lot at Hospital: _____
b. [ ] On-Street Space: _____

6. Do you use your car during the workday?
If so, indicate the typical number of days per week: _____

7. What are your monthly parking costs at the hospital?
Include all costs, including of meter fees and parking tickets: $_____

TABLE C.1 -- TABULATION OF EMPLOYEE DATABASE, JOB FIELD

NO.	PERCENT	RESPONSE
120	12.38%	A - Administrator/Management
247	25.49%	B - Office Worker/Data Processing
119	12.28%	C - Doctor
178	18.37%	D - Nurse/Therapist
17	1.75%	E - Paramedical Staff
49	5.06%	F - Service Staff (Housekeeping, Dietary, Security, Maintenance, etc.
51	5.26%	G - Professor/Teacher/Research
147	15.17%	H - Lab Technician, Pharmacist, X-Ray Technician, Miscellaneous Technician
4	0.41%	I - Student
1	0.10%	J - Volunteer
14	1.44%	K - Social Worker
22	2.27%	L - Other
969	Number of Responses	

TABLE C.2 -- TABULATION OF EMPLOYEE DATABASE, ZIP FIELD

NO.	PERCENT	RESPONSE
10	1.10%	94002
2	0.22%	94005
5	0.55%	94010
22	2.43%	94014
32	3.54%	94015
2	0.22%	94019
2	0.22%	94025
7	0.77%	94030
1	0.11%	94037
18	1.99%	94044
2	0.22%	94062
1	0.11%	94065
13	1.44%	94066
20	2.21%	94080
1	0.11%	94101
6	0.66%	94102
6	0.66%	94103
3	0.33%	94104
14	1.55%	94107
2	0.22%	94108
20	2.21%	94109
68	7.51%	94110
52	5.75%	94112
37	4.09%	94114

19	2.10%	94115
27	2.98%	94116
36	3.98%	94117
15	1.66%	94118
21	2.32%	94121
47	5.19%	94122
10	1.10%	94123
17	1.88%	94124
24	2.65%	94127
1	0.11%	94129
48	5.30%	94131
17	1.88%	94132
6	0.66%	94133
34	3.76%	94134
1	0.11%	94144
3	0.33%	94303
1	0.11%	94306
2	0.22%	94401
4	0.44%	94402
2	0.22%	94403
3	0.33%	94404
8	0.88%	94501
2	0.22%	94515
1	0.11%	94519
2	0.22%	94520
1	0.11%	94521
5	0.55%	94523
1	0.11%	94526
3	0.33%	94530
1	0.11%	94533
1	0.11%	94536
1	0.11%	94538
2	0.22%	94541
3	0.33%	94544
1	0.11%	94545
4	0.44%	94546
3	0.33%	94547
1	0.11%	94549
1	0.11%	94553
1	0.11%	94555
2	0.22%	94556
1	0.11%	94558
1	0.11%	94559
2	0.22%	94560
3	0.33%	94563
1	0.11%	94564
1	0.11%	94565
1	0.11%	94568
2	0.22%	94577
1	0.11%	94578
2	0.22%	94583
1	0.11%	94585
1	0.11%	94587
3	0.33%	94589

2	0.22%	94590
4	0.44%	94591
1	0.11%	94595
4	0.44%	94596
2	0.22%	94598
4	0.44%	94601
8	0.88%	94602
2	0.22%	94603
1	0.11%	94605
3	0.33%	94606
2	0.22%	94607
3	0.33%	94608
2	0.22%	94609
10	1.10%	94610
9	0.99%	94611
7	0.77%	94618
2	0.22%	94619
1	0.11%	94621
1	0.11%	94701
3	0.33%	94702
6	0.66%	94703
2	0.22%	94704
1	0.11%	94705
7	0.77%	94706
5	0.55%	94707
4	0.44%	94708
1	0.11%	94709
1	0.11%	94710
1	0.11%	94717
3	0.33%	94803
3	0.33%	94804
1	0.11%	94806
3	0.33%	94901
5	0.55%	94903
4	0.44%	94904
1	0.11%	94905
1	0.11%	94920
4	0.44%	94925
2	0.22%	94930
1	0.11%	94938
2	0.22%	94939
14	1.55%	94941
1	0.11%	94945
2	0.22%	94952
2	0.22%	94960
2	0.22%	94965
2	0.22%	95014
1	0.11%	95030
1	0.11%	95125
1	0.11%	95131
2	0.22%	95401

905 Number of Responses

TABLE C.3 -- TABULATION OF EMPLOYEE DATABASE, ZONE FIELD

(First three digits of zip code)

NO.	PERCENT	RESPONSE	
137	15.14%	940	Peninsula
532	58.78%	941	San Francisco
4	0.44%	943	Peninsula
11	1.22%	944	Peninsula
77	8.51%	945	East Bay
54	5.97%	946	East Bay
32	3.54%	947	East Bay
7	0.77%	948	East Bay
44	4.86%	949	North Bay
3	0.33%	950	Santa Clara County
2	0.22%	951	Santa Clara County
2	0.22%	954	Santa Clara County
905	Number of Responses		

TABLE C.4 -- TABULATION OF PARKERS DATABASE, CAR_DAYS FIELD

(Number of Days/Week Car Used During Workday)

NO.	PERCENT	RESPONSE
412	52.96%	0
55	7.07%	1
73	9.38%	2
50	6.43%	3
28	3.60%	4
160	20.57%	5
778	Number of Responses	

TABLE C.5 -- EMPLOYEE MODE OF ARRIVAL

TRAVEL MODE	SURVEY RESPONSES	PERCENT	NUMBER OF EMPLOYEES
Drive Alone	412	68.1	1236
Car Pool	41	6.8	123
Van Pool	4	0.7	12
MUNI	46	7.6	138
Alameda County Transit to MUNI	2	0.3	6
Golden Gate Transit to MUNI	2	0.3	6
Caltrain to MUNI	1	0.2	3
BART to MUNI	6	1.0	18
SamTrans	2	0.3	6
BART	15	2.5	45
UCSF Shuttle	36	6.0	108
Walk	11	1.8	33
Bike	3	0.5	9
Motorcycle	1	0.1	3
Dropped Off	23	3.8	69
TOTAL	605	100.0	1815

TABLE C1.6 -- TABULATION OF PARKERS DATABASE, COST_TENS FIELD

(Monthly Parking Cost, by Dollar Range)

NO.	PERCENT	RESPONSE (dollars/month)
513	65.94%	0
112	14.40%	1 - 10
69	8.87%	11 - 20
39	5.01%	21 - 30
21	2.70%	31 - 40
11	1.41%	41 - 50
5	0.64%	51 - 60
1	0.13%	61 - 80
7	0.90%	81 - 100
778	Number of Responses	

APPENDIX II

PROPOSED AGREEMENT BETWEEN UNIVERSITY OF CALIFORNIA, SAN FRANCISCO AND SAN FRANCISCO GENERAL HOSPITAL

PROPOSED AGREEMENT BETWEEN
THE UNIVERSITY OF CALIFORNIA, SAN FRANCISCO
AND
THE CITY AND COUNTY OF SAN FRANCISCO

WITH REGARD TO THE OPERATION OF
SAN FRANCISCO GENERAL HOSPITAL MEDICAL CENTER

BACKGROUND

San Francisco General Hospital (SFGH) had been the teaching hospital for the University of California, San Francisco (UCSF) and the Stanford Medical Schools since 1872 when SFGH opened. The relationship between the City and the teaching hospitals changed in 1959 when Stanford moved their medical school to Palo Alto, leaving UCSF as the sole teaching affiliation. This marked the beginning of the Agreement written between the UCSF School of Medicine and the City for the University's part in the operation of SFGH.

The original agreement called for the University to provide sufficient professional and support staff for the Departments of Anatomic Pathology, Anesthesia, Cardiology and the Clinical Laboratories with the City reimbursing the University for expenditures incurred. Over the years this agreement has been used to provide staff and services for the Departments of Emergency, Radiology, Oncology (AIDS Clinic), Pulmonary AIDS, G.I. AIDS, AIDS Research Laboratory, Family Practice AIDS, OB/GYN Midwifery Service, Occupational Health, and the Pharmacy. In terms of funding, this Agreement has grown from $173,639 in 1959/60 to over $21 million in 1986/87.

The benefits for each party in the relationship are considerable. San Francisco gets medical care of a quality not otherwise available for its patients at its general hospital. The Medical School gets a spectrum of patients and patients' problems which is a critically important resource for teaching and research. While the major UCSF activities at SFGH are those of the Medical School, the Schools of Pharmacy, Dentistry and Nursing also have student and postgraduate programs at SFGH.

AFFILIATION AGREEMENT

The proposed affiliation agreement provides for: (1) an affiliation for the provision of specified professional services at San Francisco General Hospital (SFGH); (2) employment by the University of University house staff serving at SFGH; and (3) a lease for the continuing use of SFGH space for the University's academic and research programs, said agreements to include or be subject to the following provisions:

(1) Affiliation agreement for the provision of professional services:

a. The initial term of the agreement will be from July 1, 1987 through June 30, 1988, and thereafter shall be subject to annual review by the Health Commission and the Board of Supervisors not less than 180 days prior to June 30 of each fiscal year; in the event the Health Commission and the Board of Supervisors of the City and County of San Francisco do not elect to make any changes in this Agreement, it shall continue in full force and effect until the completion of the next succeeding fiscal year subject to termination provisions, with termination requiring one year's notice; however, if the budget of SFGH, including the University's portion of the budget, is reduced ten percent or more from the immediately preceding year, the agreement may be terminated by the University on sixty days' notice;

b. The University will provide specified professional services at SFGH, including patient care, supervision of University house staff (residents and postdoctoral fellows), University nurses, and other University personnel; professional advice and consultation; organization and administration of medical staff at SFGH; selection, training, and supervision of house staff, medical students, and others who rotate through SFGH from other institutions; and patient care services for medically indigent adults;

c. The City and County of San Francisco will reimburse the University for salaries, stipends, and fringe benefits for faculty and other employees assigned to SFGH and for University house staff for the portion of time they are assigned to SFGH, and for direct administrative costs, supplies, and additional patient care services, all such reimbursement to be subject to the budget and fiscal provisions of the City and County Charter, with the maximum dollar obligation of the City and County to be the amount approved by the Board of Supervisors in adoption of the annual budget and Annual Appropriation Ordinance, and further, in the event of reduction in the budget of SFGH, including the University's portion of the budget, below the actual budget of the immediately preceding year, such reduction shall be shared in an equitable manner based upon negotiations between the administrator of SFGH and the Associate Dean of the School of Medicine designated to be responsible for such negotiations; but in no event will there be a reduction of financial support for University employees occupying positions for which University personnel policies require notice of nonrenewal of appointment for a period

equivalent to the notice period the University is required to provide;

d. Payment specified for 1987-88 will be adjusted in subsequent years to allow for University merit increases, salary range adjustments, cost of living allowances, agreed-upon changes in staffing levels at the projected salary and benefit rates of the University, and necessary increases in supplies and related expenses;

e. The University will maintain and make available to the City and County of San Francisco accurate books and fiscal records, and these and other relevant documents will be made available upon request to the Secretary of the U.S. Department of Health and Human Services and the Comptroller General of the United States or their authorized representatives;

f. The City and County of San Francisco will retain full responsibility for operation of SFGH;

g. The City and County of San Francisco and the University each will indemnify the other; and

h. A mechanism for the resolution of disputes will be included in these provisions.

(2) Agreement concerning the employment of house staff:

a. The term of this agreement will begin no earlier than July 1, 1987, if the affiliation agreement described in section (1) above (of which the house staff agreement is an Exhibit) is in effect on that date, or on the first of the month following the effective date of said affiliation agreement, and the house staff agreement will remain in effect until the following June 30 and will be subject to annual review by the Health Commission and the Board of Supervisors not less than 180 days prior to June 30 of each fiscal year; in the event the Health Commission and the Board of Supervisors of the City and County of San Francisco do not elect to make any changes in this agreement, it shall continue in full force and effect until the completion of the next succeeding fiscal year subject to termination notice with notification of termination by either party required not less than 180 days prior to any June 30;

b. The University will be the sole employer of the house staff at SFGH and will have sole responsibility for all academic aspects of the house staff program, including selection, training, supervision, scheduling, evaluation, and discipline of house staff;

c. The University will establish and pay house staff salaries, stipends, and other benefits;

d. The City and County of San Francisco will reimburse the University for the expenses in (2)c. above for the time the house staff is assigned to SFGH according to a schedule described in the affiliation agreement in section (1)c. above and, for medically indigent adults, in accordance with a mutually agreed upon Letter of Understanding subject to annual renegotiation;

e. In recognition of the long-term commitments by the University to the support required for training programs described in sections (1)b. and (2)b. above, the City and County of San Francisco agree to notify the University by January 1 before any impending fiscal year of any required increase or decrease in staffing;

f. A mechanism for resolution of disputes will be included in these provisions; and

g. In the event that house staff bargains collectively, the University and the City and County of San Francisco will cooperate in resolving issues.

(3) Lease agreement:

a. The term of this agreement will be from July 1, 1987 through June 30, 1988, and will be renewed automatically annually for up to fifty (50) years, except that the term would end automatically on termination of the affiliation agreement described in section (1) above, to which the lease agreement is an Exhibit;

b. The City and County of San Francisco will lease specified space to the University for academic projects and will provide the necessary utilities and janitorial services;

c. The cost of rent and utilities for said space will be offset by University-funded professional services, such as malpractice coverage of all faculty physicians and house staff, provided under Section 10 of the affiliation agreement described in section (1) above;

d. This lease agreement is independent of, and in no way affects, any other lease agreement between the two parties; and

e. The City and County of San Francisco and the University each will indemnify the other.

APPENDIX III

MENTAL HEALTH SKILLED NURSING CENTER BOND PROGRAM REPORT

June 1, 1987

TO: Dr. Philip Lee, President and
Members of the Health Commission

FROM: David Werdegar, M.D., M.P.H.
Director of Health

RE: BOND PROGRAM REPORT

The Department of Public Health presents the Bond Program Report, a proposal to develop a Mental Health Skilled Nursing Center. This project is the most pressing need for Community Mental Health Services. Without a subacute facility, the costs of acute care which stress the mental health system will continue to escalate. Development of a reasonable system of care for re-entry into the community requires a San Francisco based skilled nursing facility. Placement in an out-of-county facility as far away as Stockton or Vallejo greatly impedes the patient's ability to recover.

- NUMBER OF BEDS - 185
- LOCATION - San Francisco General Hospital at 21st Street & Potrero
- COST - $26,000,000 total project cost in 1991.
- FINANCING - General Obligation Bond requiring voter approval
- OPERATING BUDGET - The projected operating budget will require no additional General Fund dollars.
- TYPE OF FACILITY - This Center will provide a level of care - after the acute hospital and before community care that is not available in the City. It will be licensed as a Skilled Nursing Facility, a distinct part of San Francisco General Hospital
- TREATMENT GOALS :
  - To be rehabilitative and to assist in re-entry to the community.
  - To emphasize individualized care
  - To assist inclusion of the family in the treatment program
  - To be responsive to cultural and linguistic needs of the patients.

EXECUTIVE SUMMARY

NEED

For many years San Francisco Citizens interested in mental health have recognized that there is a large gap in the continuum of psychiatric services.

The City does not have a mental health skilled nursing center to provide long term psychiatric care. As of April, 1987, 209 San Francisco residents were receiving psychiatric skilled nursing care outside the County in facilities in Marin, San Mateo, Solano, and Santa Clara counties.

In addition, during the first six months of this year there were an average of 80 patients waiting each day in Napa State Hospital and the acute psychiatric hospital wards for a transfer to a more appropriate and less expensive level of care.

Local treatment is more effective treatment. The mental health skilled nursing center would provide a more effective treatment program because it would specialize in psychiatric care and be more responsive to the needs of the San Francisco community. The program would be able to hire and provide appropriate linguistic, ethnic and cultural supports to the diverse patients in San Francisco.

Local Facilities enable a greater continuity of care. When a patient recovers from an acute mental illness, it is likely that he or she will receive treatment at more than one program, gradually reentering the community. Successful treatment requires reasonable coordinated transition provided by case management services. Currently travel reduces staff time for such transition planning and support. Case managers must commute among the out-of-county skilled nursing facilities in order to visit their patients.

Locating 185 of the long term clients in San Francisco will mean that staff check on their status more frequently and work with families to plan discharges. It may also reduce costs by shortening the length of stay of some clients and increasing the probability that they will find effective treatment in the community.

Family members will be able to visit patients more easily. Visits by friends and family are extremely important to patients recovering from mental illness. Placement in an out-of-county facility, some as far away as Stockton, greatly impedes the patient's ability to recover.

The current patchwork of service delivery is costly and unmanageable:

1. Napa Hospital has limited San Francisco to 246 beds; San Francisco is now required to pay for days in excess of this quota, which could cost the City as much as $2 million a year.

EXECUTIVE SUMMARY

2. Acute hospital beds are needed for acute care. It is costly to continue the current practice of keeping people in the hospital waiting for a skilled nursing facility bed - $400/day.

3. Out-of-County nursing facilities will not meet our long term needs:

   . Competition for the beds is fierce among counties and we have none located in San Francisco.

   . Medi-cal reimbursement, an important part of the funding mechanism for these programs, is in jeopardy and it is likely that additional County dollars would be needed for any shortfall due to a loss in Medi-cal revenues.

   . Using exclusively out-of-county facilities will not allow patients awaiting court review to leave the hospital for a lower level of care until court proceedings were completed.

SITE

The San Francisco General Hospital Campus site is particularly well suited for this facility. Continuity of care will be enhanced by the location of subacute skilled nursing services adjacent to the acute care psychiatry unit. The County will realize savings by operating the skilled nursing facility as a distinct part of the hospital rather than as an independent unit. Services would be located on a site easily accessible by public transportation. When services are available locally and linked to a continuum of care, clients return quickly to community programs.

PROGRAM DESIGN

Program design emphasizes the treatment goals of the clinical program. The services will have a transitional and rehabilitative focus which encourages patients to develop the capacity for increasing levels of independence to prepare them to reenter and to remain in the community.

The program design reflects the commitment to preserving the dignity of the individual and to provide effective treatment in the least restrictive setting.

The program includes the family in the treatment process.

FACILITY DESIGN

The facility is an arrangement of two principal buildings around a central quadrangle or court. One building houses the adolescent unit, the gymnasium, and activity/therapies, dining and administration. The other building houses the adult open living units. Each adult unit is a cluster of no more than 15 beds, each with its own identity, lounge and outdoor space.

This facility is designed as a skilled nursing center. Therefore, if San Francisco subacute mental health needs should decrease the facility would be equally appropriate for geriatric, long-term convalescent or AIDS skilled nursing care.

EXECUTIVE SUMMARY

To minimize impact on traffic, the entrance is off of 22nd Street. Only exiting cars would be routed directly onto Portrero.

The project would be no more than three levels in height, well within the Zoning Code requirements.

PARKING

The planners recognize the parking problems at San Francisco General Hospital. This plan provides for 79 parking spaces. Additional parking needs are being addressed by the City's development of a garage adjacent to the hospital.

PATIENTS SERVED

There are three program components:

- The Adolescent Program designed for older adolescents who require subacute treatment appropriate to teenagers.
- The Difficult Patient Program for patients who generally are hard to place in other treatment facilities due to behavior problems but who do not require acute hospital care.
- The Adult Open Units for patients who have mental illnesses requiring a prolonged structured treatment program. Within these units, there will be ethnic focus groups sensitive to the ethnic, linguistic and cultural considerations of various populations and a geriatric unit for the older patient. The clinical program will take into account the special needs of patients who are developmentally disable or who are substance abusers.

The psychiatric patient with concomitant medical illness which requires significant nursing care will not be served in this facility. This need was identified during the program design stage and will be addressed by the Health Department through other San Francisco health care resources.

OPERATING REVENUES

The Skilled Nursing Center will be licensed as a "distinct part" skilled nursing facility of San Francisco General Hospital. Laventhol and Horwath, Health Finance Advisors, completed an analysis of the revenues anticipated to the expected operating costs. These findings are summarized in this report and show that the facility revenues can in large part support the operations of the center.

No additional GENERAL FUND dollars are needed for operation. Currently CMHS spends over $3,000,000 on out of county skilled nursing beds. By building a facility in San Francisco, any operating costs above revenues can be offset by this already budgeted expenditure.

EXECUTIVE SUMMARY

EQUIPMENT

This report finds that $2,000,000 is needed for furniture, fixtures, and equipment, which will not be included in the general obligation bond amount.

The Department of Public Health will seek to finance these purchases through Federal grants and/or State Health Financing Authority loans which will be repaid within the Department of Public Health Budget.

PROJECT SUMMARY

This report describes the following project scope and its program needs, plant configuration, and preliminary cost:

- 185 BEDS: 120 Open, 50 Difficult Behaviors, 15 Adolescents
- 89,200 total square feet
- $26,000,000 total project cost in 1991
- $195 per square foot (1987 Construction Cost)

The project cost includes construction of the utility tunnel, parking of 79 cars on grade, fees, permits, administrative costs, and escalation to mid-point of construction (1991).

The building will be secured to provide for patient safety and also to prevent unauthorized access from the general public.

This program would greatly alleviate the current mental health gap in subacute services. It does not completely meet the needs identified. In addition, Community Mental Health Services is strongly committed to developing ways of augmenting services in the community.

SUMMARY OF DEMAND ANALYSIS AND PROSPECTIVE FINANCIAL ANALYSIS

SCOPE OF REPORT

Laventhol & Horwath, Management Advisory Services, analyzed utilization patterns of existing San Francisco long-term care facilities for the mentally ill and out-of-county referral patterns for patients appropriate for this facility to determine the need for such a center.

They also analyzed the historical trends of revenues, expenses, facility staffing patterns and third-party reimbursement patterns for similar facilities to complete the prospective financial analysis.

FINDINGS

1. There is sufficient demand for the 185 bed project. The report analyzed three alternatives: 125 beds, 165 beds and 185 beds; the 185 bed facility was most cost effective.

2. The staffing pattern is the equivalent of 202.7 full time positions.

3. New revenues from Medi-cal reimbursement for the Center and other revenues would equal $6,107,726, during the first year of operation. This estimate is based on a 30% denial rate of Medi-Cal days.

4. Expected operating costs for the first year of operation would be $7,610,220; the difference of $1,502,493 is offset by the current budget item for skilled nursing care in the Community Mental Health Services budget, now used for out-of-county placements which will not be necessary when beds exist in the City.

5. The difference between operating expenses and anticipated third party reimbursement will not exceed the first year amount during the subsequent years analyzed for the report.

SUMMARY OF OPERATING EXPENSES AND ANTICIPATED REVENUES

ASSUMPTIONS

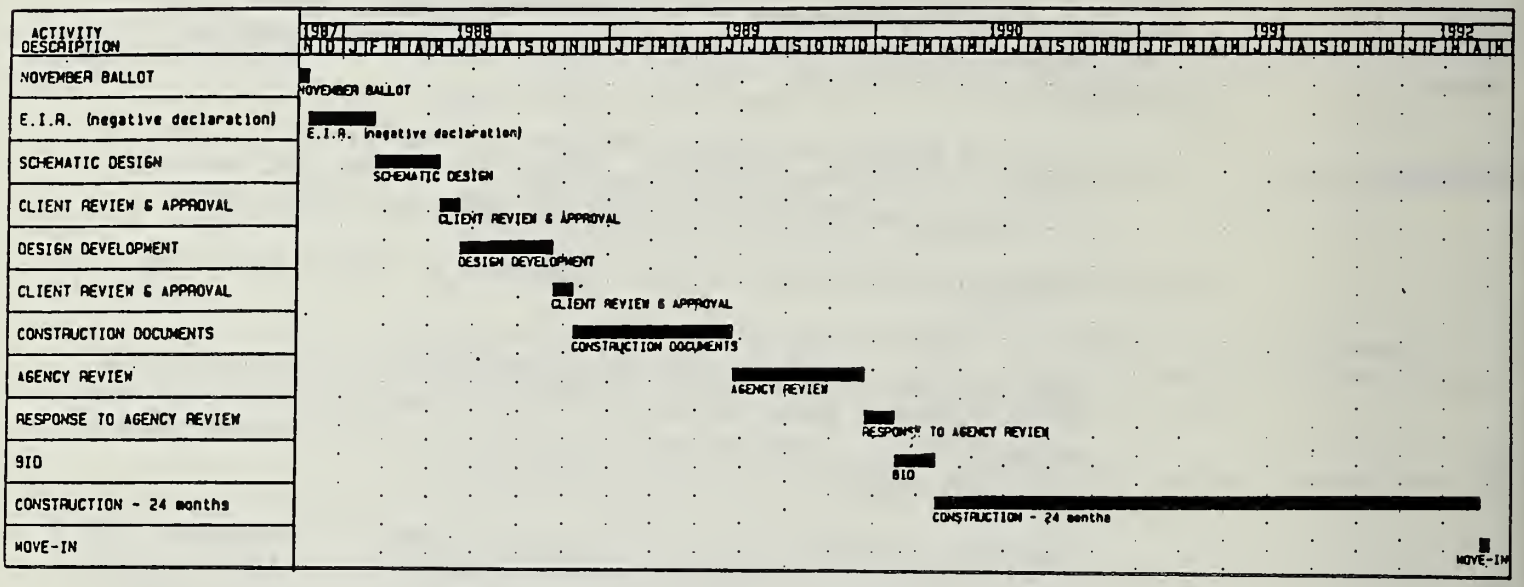
The analysis assumed a 95% occupancy within 3 months of operation; a cost-of-living is included based on the California Consumer Price Index estimate of 4.2% in 1988, 4.7% in 1989 and 4% thereafter.

	1987	1988	1989	1990	1991
OPERATING EXPENSES	$7,610, 220	$8,191,317	$8,583,112	$8,926,436	$9,283,494
MEDI-CAL AND OTHER REVENUES	$6,107,726	$6,893,250	$7,215,141	$7,501,860	$7,800,049
EXCESS OF EXPENSES OVER REVENUES*	$1,502,493	$1,298,067	$1,367,971	$1,424,576	$1,483,445

* This amount is currently in the Community Mental Health Budget and requires no new allocation.

PROJECT SCHEDULE

The Center should be ready to be occupied in mid-1992.



STATEMENT OF PURPOSE OF THE PROJECT

PROJECT NEED

The proposed Mental Health Skilled Nursing Center is intended to provide "step down" psychiatric care tailored to the specific needs of local patients. Since no facility of this kind is located within San Francisco County, County patients (there are currently over 200) are assigned on a contract basis to facilities elsewhere; most often to localities in Santa Clara, San Mateo, Marin, and Solano Counties. This long distance separation places an unreasonable strain on the County's mental health program, both logistically and in terms of enabling positive treatment of patients. The opportunity for such treatment suffers because, among other reasons, patients are not afforded the benefits of that proximity to family and friends which often can be instrumental in patient recovery. The opportunity for clinical continuity suffers because the contracted nursing home beds are not part of a coordinated system of care.

The program and plan of the proposed facility is structured to address these issues. Its location on the San Francisco General Hospital Campus provides good public transit access for the inclusion of family and friends in the treatment process; and its location within the county will help in keeping better track of the patient.

BED NEED

Currently San Francisco has 209 patients in City supplemented subacute programs out of county, and at any given time, up to 80 patients waiting in acute care facilities or Napa State Hospital, who have been decertified for acute but for whom subacute placement is not immediately available. In addition, at any given time, there are 10 - 20 older adolescents in need of specialized treatment. The proposed facility would address the needs of a majority of these patients.

The facility will fill a major gap in the coordinated system of care provided by the Community Mental Health Services.

STATEMENT OF PURPOSE OF THE PROJECT

MISSION STATEMENT

With the decision to plan a new facility comes the directive to plan and provide a high quality program, one that addresses the unique needs of San Francisco patients, one that is the best of its kind. To this end the following mission statements have been given to the planning/programming team:

- Challenge existing approaches to mental health care.
- Develop creative treatment approaches.
- Treat as many types of patients as possible regardless of their difficulty.
- Utilize multidisciplinary therapy approach.
- Foster an understanding of staff and patient interaction.
- Prevent recidivism.
- Provide dignified treatment in the least restrictive environmentally non-institutional setting.
- Be cost effective.

STATEMENT OF PURPOSE OF THE PROJECT

GOALS

In planning and programming the Mental Health Skilled Nursing Center the following goals and objectives have been defined:

TREATMENT GOALS

- To be rehabilitative and transitional, focusing on re-entry to and remaining in the community.
- To emphasize individualized care.
- To assist in inclusion of the family in the treatment program.
- To be responsive to cultural and linguistic needs of patient.

MEDICAL TREATMENT GOALS

- To emphasize non-pharmacological behavior change.
- To provide for continual assessment of patient's medical needs.
- To provide mechanisms to educate patients about psychotropic medication.

ENVIRONMENTAL GOALS

- To provide small, structured living settings.
- To provide home-like, real-life accommodations.
- To maximize staff and patient interaction.
- To provide opportunities for responsibility, capability, and choice.
- To provide a non-restrictive (appropriate to the level of care) environment.
- To provide maximum flexibility.
- To provide opportunities for interaction with community.
- To provide an attractive, well maintained, and realistic facility.

STATEMENT OF PURPOSE OF THE PROJECT

PATIENT TYPES

Three types of patients will be treated at this facility: adolescents in need of specialized treatment, adults displaying difficult behavior, and adults requiring subacute psychiatric care. These include subcategories of geriatric patients and monolingual patients. The typical medical profile of these patients indicates:

PATIENT PROFILE

- 70% are schizophrenic.
- 25% have major affective disorders.
- Majority have a significant history of substance abuse, particularly alcohol.

PATIENT PROGRAM

SUBACUTE PATIENTS

- **120 Beds**

The space program for the subacute patients at this facility provides clusters of small identifiable living units within which patient and staff interaction is encouraged through spatial configuration as well as policy. Within these clusters, one cluster is designed to meet the mobility impairment of the geriatric patients. In addition, cultural and linguistics "focus" groups are provided space on a cluster basis.

The setting should be:

- Open, interactive and homelike.
- Easily accessible to outdoors and recreation.
- Divided into groups of approximately 15 patients.

Programs provided for the subacute patients will include:

- Basic living skills
- Dining
- Community Meetings
- Education: GED, Community, Adult education
- Prevocational Training
- Recreation
- Outings
- Crafts/Art/Music/Cooking
- Survival Skills
- Medication Responsibility
- Volunteer Work

STATEMENT OF PURPOSE OF THE PROJECT

PATIENT TYPES (Cont'd)

ADOLESCENT PATIENTS — **15 Beds**

The space program for the adolescent patients addresses the need for an individual identity and separation from other patients within the facility.

The unit's setting provides:

- A home-like, self-contained environment.
- Easy access to outdoor space and recreational activities.
- A separate entry.

Programs provided for adolescent patients will include:

- Socialization
- Individual and group psychotherapy
- School, with special education as necessary
- Medication, where appropriate
- Vocational training
- Recreation-outings, entertainment
- Art, music, craft, etc.
- Family involvement
- Community re-entry skills

DIFFICULT BEHAVIORS PATIENT

- **50 Beds**

The space program for the difficult behaviors patients provides a centralized arrangement of bedrooms, focused around the nurses' station for maximum visibility providing the most secure environment.

The unit's setting is:

- Centralized and self-contained
- Provides supervised outdoor areas

Programs provided for the difficult behaviors patients will include:

- Group counseling and socialization.
- Medication counseling.
- Individual counseling.
- Recreational and physical outlets.
- Crafts, art, music therapy.
- Community re-entry skills.

BUDDGET COST PLAN
Component Summary - 185 Bed Facility

			$/SF	$M
BUILDING				
1. Foundations			5.65	500
2./3. Structure			23.73	2,100
4. Exterior Cladding			24.86	2,200
5. Roofing and Waterproofing			3.73	330
6. Interior Partitions			16.72	1,480
7. Floor, Wall and Ceiling Finishes			8.70	770
8. Function Equipment and Specialties			12.43	1,100
9. Vertical Transportation			4.97	440
10. Plumbing			8.59	760
11. Heating, Ventilating & Air Conditioning			18.64	1,650
12. Electrical			15.25	1,350
13. Fire Protection			2.49	220
BUILDING SUB-TOTAL	88,500	SF	145.76	12,900
General Contractor's site establishment, supervision, equipment, temporary services, job expense, performance bonds and profit	15	%	22.60	2,000
Planned Construction Cost, May 87	88,500	SF	168.36	14,900

SITEWORK	QUANTITY	UNIT	RATE	
Cut and fill	6,500	CY	7.70	50
Clear				70
Central court	7,400	SF	15.00	110
Courtyards	12,500	SF	15.00	190
Covered walk	2,200	SF	50.00	110
Concrete paving	3,100	SF	4.00	15
On-grade parking	40,800	SF	4.50	165
Landscape	37,500	SF	3.50	130
Trees				20
Courtyard walls				65
General Conditions				125
Design Contingency				100
				$M1,150

BUDGET COST PLAN
Component Summary - 185 Bed Facility

	QUANTITY	UNIT	RATE	$M
UTILITIES				
Allowance				$M150
TUNNEL				
Structure	570	LF	1.4M	800
Utilities				100
General Conditions and Contingency				100
				$M1,000
HIGHWAY BARRIER				
Reinforced concrete wall	3,750	SF	40.00	$M150
KITCHEN UPGRADE				
Allowance for existing kitchen (no equipment)				$M150
Planned Construction Cost May 1987				$M17,500
FEES/PERMITS				
Architect and Design Consultant Fees (includes allowance for reimbursable expenses)				1,500
Inspecting and Testing				150
Construction Management				600
Plan check fees and assessments				300
City management, legal and accounting				300
	16	%		$M2,850

BUDGET COST PLAN
Component Summary - 185 Bed Facility

PROJECT CONTINGENCY			$M
Change Orders	5	%	1,000
Construction Contingency	5	%	1,000
			$M2,000
FURNITURE, FIXTURES & EQUIPMENT			
Group 2 and 3 Equipment - Separate Budget			
ESCALATION			
Mid-point 1991 - 42 months at 4.5% p.a.	16	%	$M3,650
Recommended Budget for Construction			$M26,000

BUDGET EXCLUDES

Cost of soils and survey reports

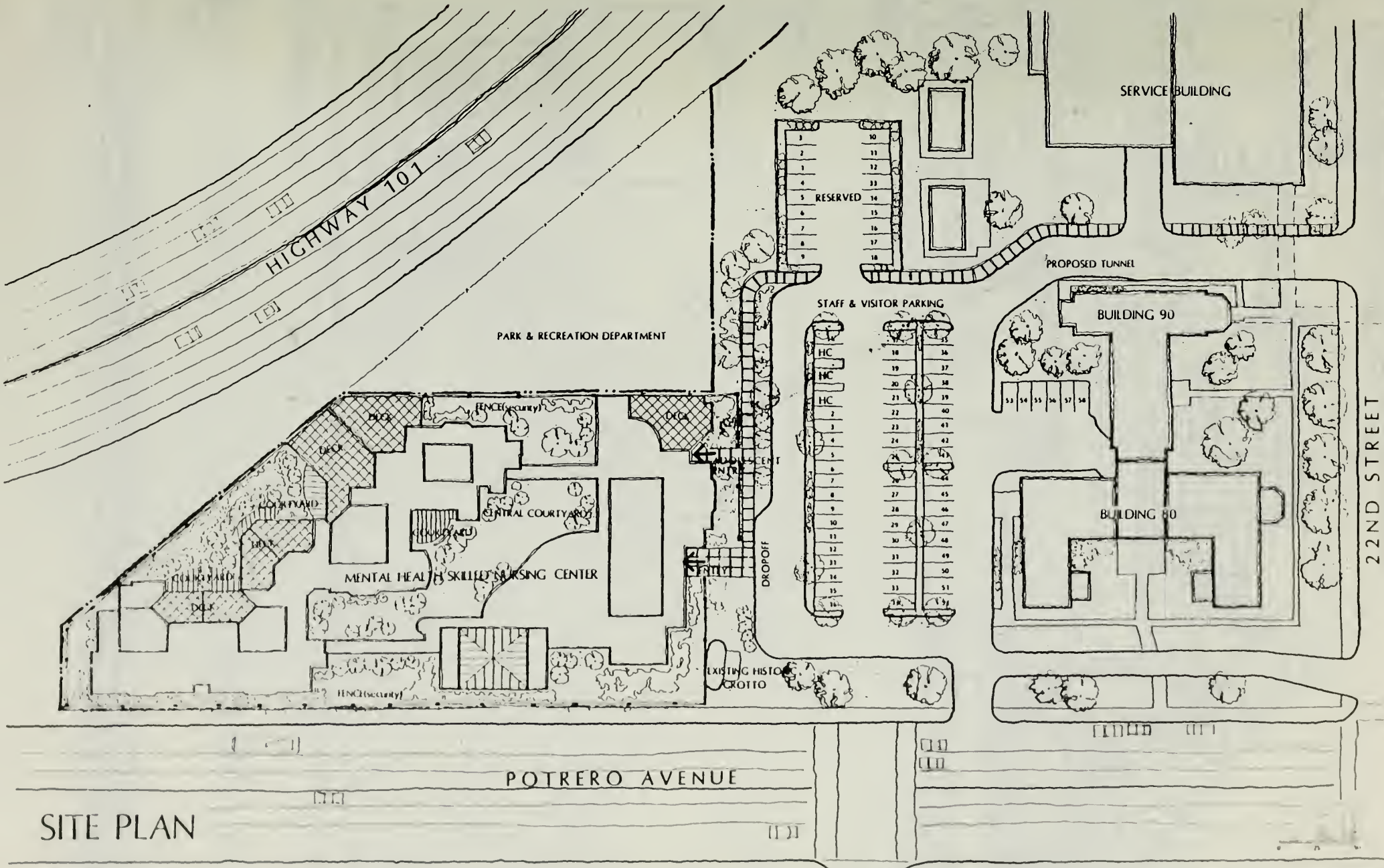
EIR report

Cost of financing or bonds

Furniture, fixtures and equipment

Full kitchen equipment if required

Utility connection charges or fees



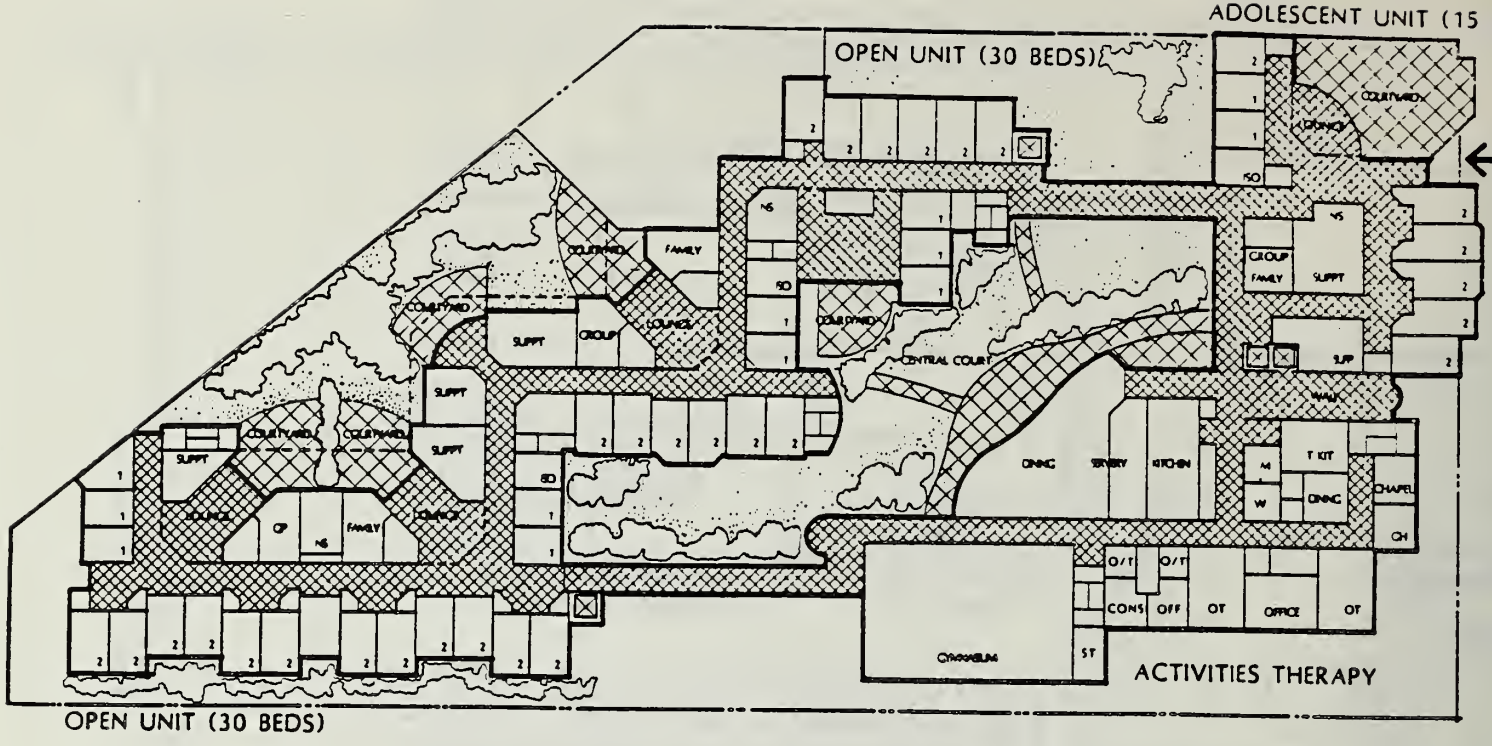
SITE PLAN

KAPLAN · McLAUGHLIN · DIAZ
Architects · Planners
[illegible]
Gordon H. Chong & Associates
Associate Architects

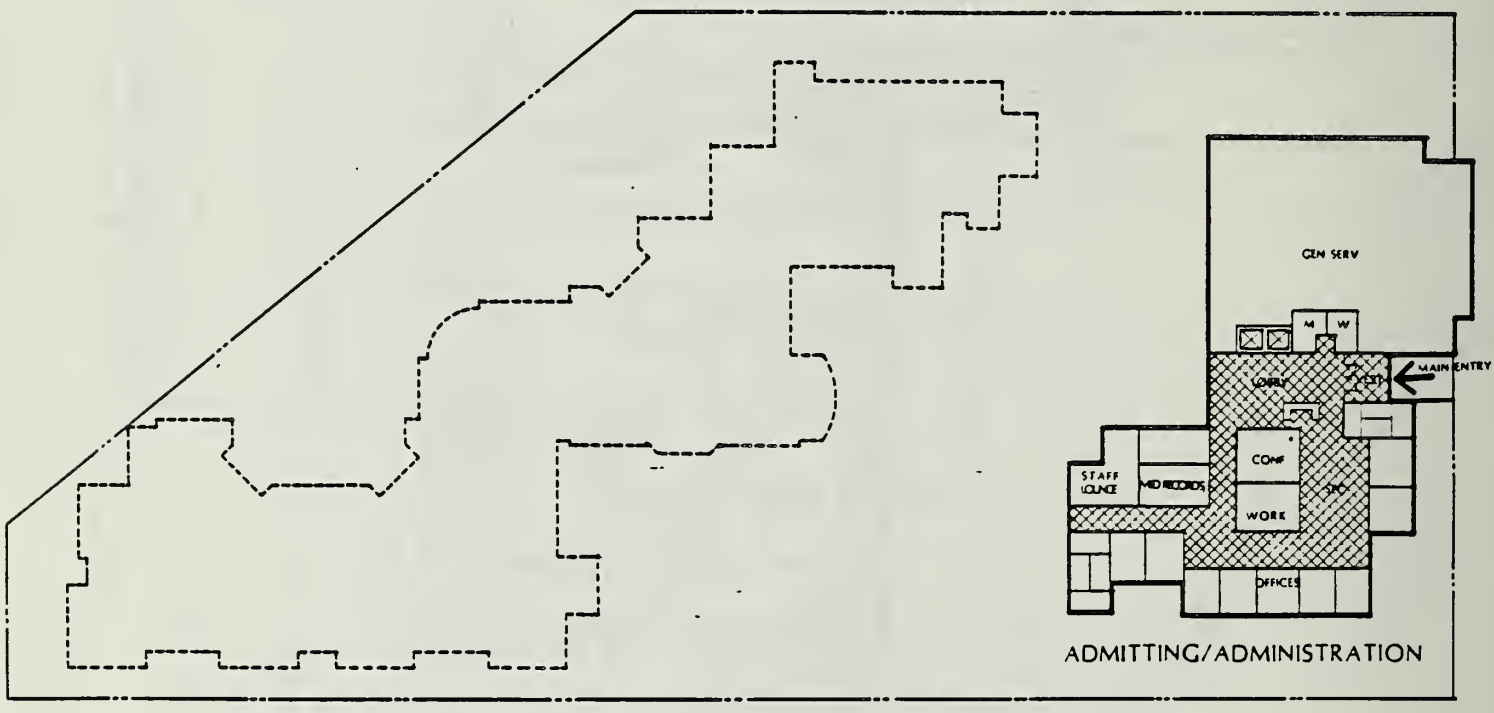
MENTAL HEALTH SKILLED NURSING CENTER at San Francisco General Hospital

City and County of San Francisco • Department of Public Health

12 MAY 1987

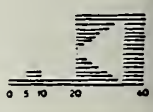


LEVEL 1
ELEV 82.5



GROUND LEVEL
ELEV 70

SCHEME A - 185 BEDS



MENTAL HEALTH SKILLED NURSING CENTER at San Francisco General Hospital

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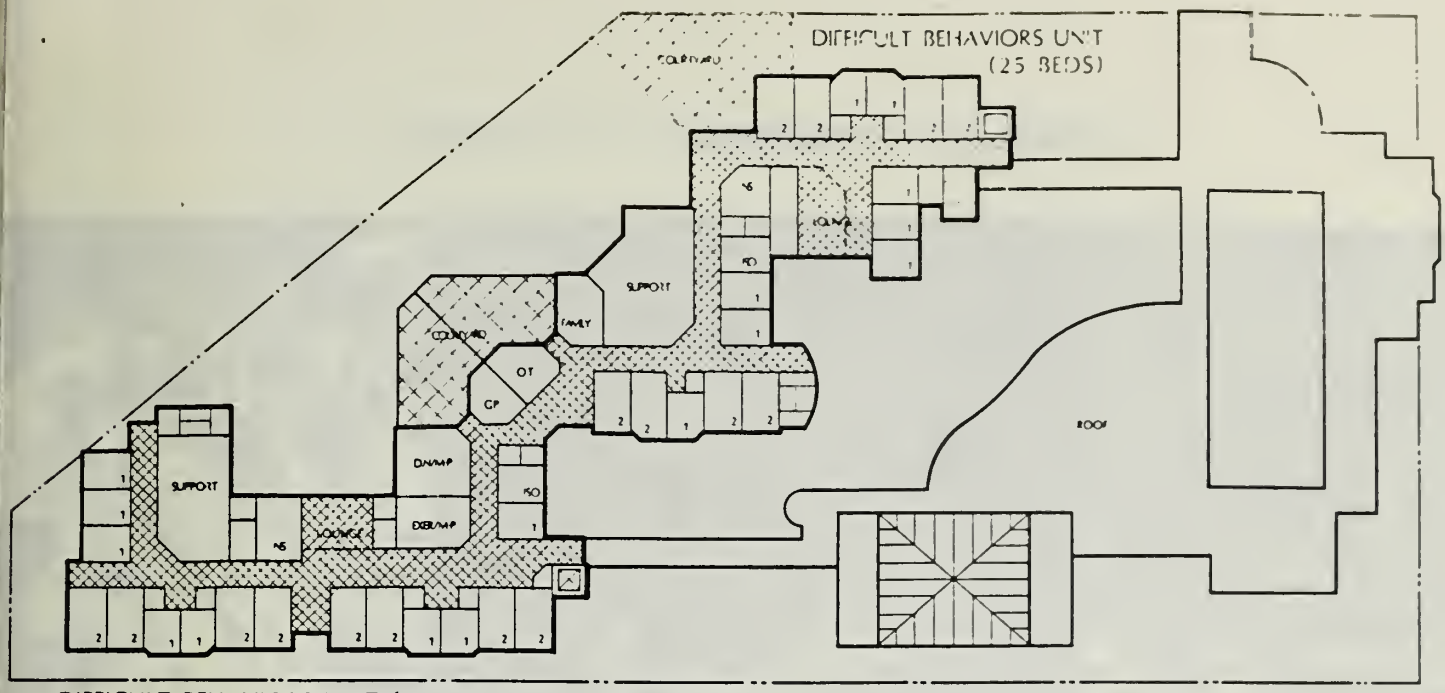
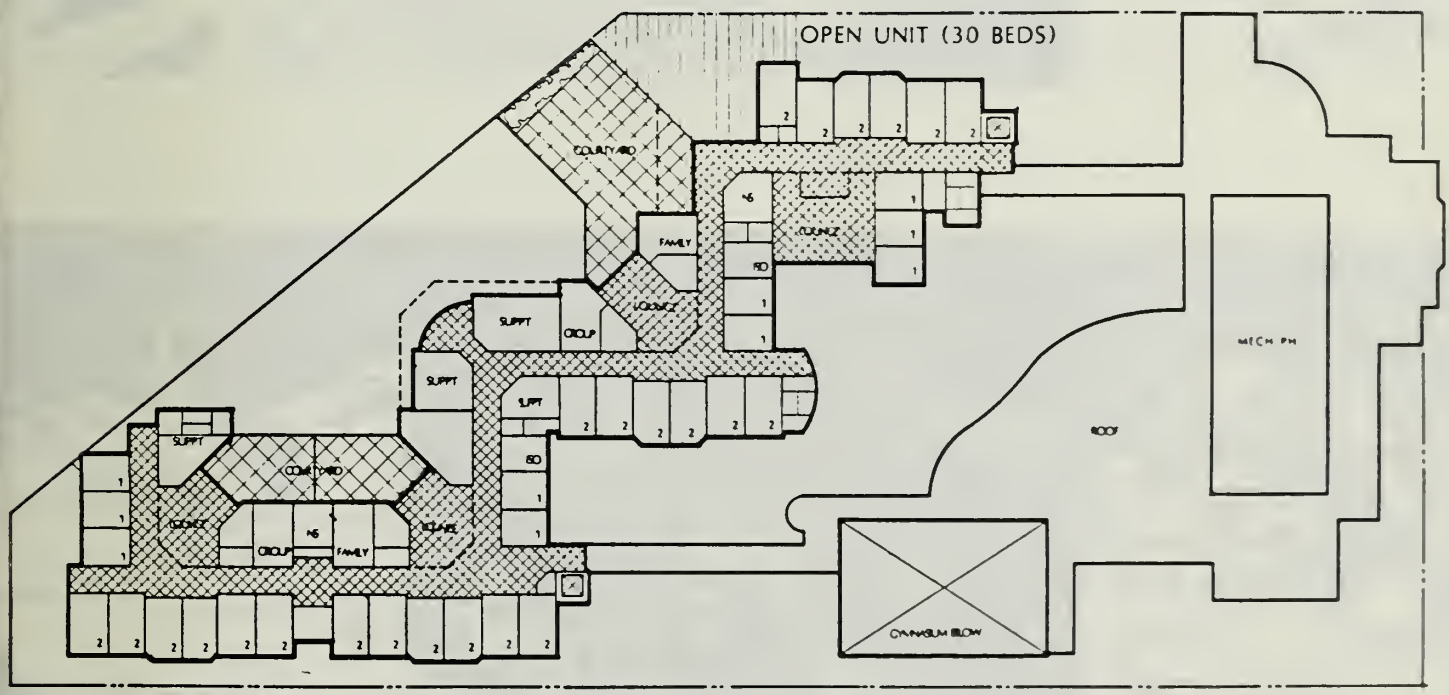


DIFFICULT BEHAVIORS UNIT (25 BEDS)

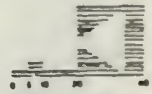
LEVEL 3



OPEN UNIT (30 BEDS)

LEVEL 2

SCHEME A - 185 BEDS



MENTAL HEALTH SKILLED NURSING CENTER at San Francisco General Hospital

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PHOTOGRAPHS OF STUDY MODEL

PHOTOGRAPHS OF STUDY MODEL